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ABSTRACT

This report describes a six-year followup of high school students in Ontario. The report is based on surveys conducted while the students were in grade 12 and at two intervals shortly thereafter. The first two chapters present an overview of the characteristics of the respondents and a description of their educational and occupational activities after leaving high school. Chapter 3 reports on a series of questions designed to gauge the link between schooling and work. Findings on who got what kind of education, grades received, records of completion, and ways in which this postsecondary schooling was financed are presented in chapter 4. Chapter 5 is a study of the issues surrounding interruption of schooling after high school, withdrawal after commencing postsecondary programs, and rates of completion. Chapter 6 reports findings with respect to occupational prestige and salary. Chapter 7 presents findings on private vocational schools, adult education, apprenticeships, and short courses, and assesses their importance to the respondents. In chapter 8, a number of individuals give their personal accounts of schooling and work on the basis of their priorities. The final chapter gives a set of statements regarding equality of educational opportunity in Ontario and presents a set of recommendations. The questionnaire is appended. (LRA)

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IS THE DIE CAST?

Educational Achievements and Work Destinations of Ontario Youth

A Six-Year Follow-up of the Critical Juncture
High School Students

PAUL ANISEF
J. GOTTFRIED PAASCHE
ANTON H. TURRITTIN

CE 025 136

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TABLE OF CONTENTS

Table of Contents . . . iii

List of Tables . . . viii

Preface . . . xvi

Highlights . . . xxi

Chapter One
Introduction: Project Background, Study Design and Sample Description . . . 1

Background . . . 1

Research Problem . . . 4

Research Design . . . 9

Background . . . 9
Review of Survey Methodology . . . 10
Review of Qualitative Methodology . . . 12

How to Read the Tables . . . 13

What Has Happened to the Grade 12 Students? . . . 17

Age and Marital Status . . . 17
The Crossover Table Extended . . . 18
The Timing of Post-Secondary Education . . . 23
What Are the Phase IV Respondents Doing Now? . . . 25
Entrance into the Labor Market and Current Jobs . . . 27
Geographical Mobility . . . 28

Notes . . . 30

Chapter Two
Methodological Considerations in the Survey . . . 41

A Comparison of Phase IV Respondents and Nonrespondents . . . 41

A Comparison of Phase IV Respondents by Mode of Response . . . 44

Restricted Response Ranges for Telephone Interviews . . . 46

Representativeness of the Sample . . . 47

Weighting Procedures Used in This Report . . . 50

Notes . . . 50

Chapter Three
High School Experiences: Looking Back at the Early Seventies 57

Introduction 57

Performance, Activities, and Background Factors 59

  Type of Program 59
  Academic Performance 60
  Participation in Extracurricular Activities 60
  Involvement in the Leading Crowd 62
  High School Subcultures 62

Social-Psychological Dimensions 63

  General and Job-Related Usefulness of Education 63
  Assessing the Impact of High School Experience 65
  Education and Work by High School Program 66
  Values 68
  High School Program and Personality 68

Notes 71

Chapter Four
Post-Secondary Education: Going to Universities and Colleges 102

Introduction 102

Who Got What Kind of Education 103

  Gender in Relation to Educational Attainment 104
  Socioeconomic Status in Relation to Educational Attainment 104
  Grades in High School in Relation to Educational Attainment 108
  Area of Origin in Relation to Educational Attainment 109
  Occupational Expectations in High School in Relation to Educational Attainment 113

Course Length, Degrees, Majors, and Degree Completion 114

  Course Length and Degrees Received 115
  Majors and Programs 116
  Grades and Degree Completion 117

Financing Post-Secondary Education 119

Reasons for Choosing Major or Area of Specialization 123

General Satisfaction with the Post-Secondary Experience 129

Notes 130

Chapter Five
Interruption of Schooling and Withdrawal from Post-Secondary Institutions. . . . . .1[illegible]

Interruption of Education. 163

Withdrawal from Post-Secondary Education 168

Social Backgrounds and High School Experiences. 171
Work Experiences, Income, and Personal Values 173

Notes. 175

Chapter Six
The Link between Education and Work. 205

Introduction 205

The Attenuation of the Role of Socioeconomic Status. 208

The Statistics Canada Occupational Categories 209
The Blishen Score of Occupational Prestige. 209
The Role of Socioeconomic Status and Occupation 212

Education and Job and Career Beginnings. 214

Gender and Occupations. 215
Socioeconomic Status and Occupations. 216
Region and Occupations. 220
Educational Attainment and Occupations. 222

Education and Income 228

Post-Secondary Education and Underemployment 232

Respondents' Perceptions of the Link Between Education and Jobs 236

Evaluation of the Post-Secondary Educational Experience. 236
Perceived Relationship of Post-Secondary Education to First Full-Time Job 239
Perceived Relationship of Post-Secondary Education to Current Full-Time Job 242

Notes. 245

Chapter Seven
Alternative Forms of Education: Private Vocational Schools, Adult Training, Apprenticeship, and Short Courses. 273

History of Alternative Education 273

Participation and Sources. 275

Alternative Education: A Description of Participants. 276

Consequences of Involvement in Alternative Educational Programs. 278

Notes. 280

Chapter Eight
Speaking Out: Situations and Strategies 294

Introduction 294

Speaking Out 295

John. 295
Penny 300
Janice. 305
Greg. 310
Carl. 316
Ada 322
Andrew. 329
Rose. 333
Joyce 338
Diane 341
Walter. 344

Themes and Issues. 349

Chapter Nine
Conclusions and Recommendations. .360

Accessibility to Higher Education. 362

Accessibility and High School Education 364
Accessibility and Post-Secondary Education. 367

Equality of Opportunity within Educational Institutions. 370

The Consequences of Participation in Higher Education. 374

General Conclusions. 381

The Value of a University Education 384
Future Research 385

Notes. 387

Appendices

Appendix A: Survey of Ontario Grade 12 Students: Phase IV. A-1

Appendix B: Operational Rules for Constructing Commonly-Used Variables in This Report. B-1

Appendix C: Phase IV Questionnaire. .C-1

LIST OF TABLES

1.1 Marital Status by Sex, 1979 32

1.2 Educational Achievement by Sex, 1979. 33

1.3 Alternative Forms of Public Education and Levels of Educational Attainment by Sex. 34

1.4 Extended Crossover Table Relating Educational and Vocational Expectations in the Spring of 1973 to Educational and Vocational Activity in the Fall of 1974 and Educational Attainment in 1979. 35

1.5 The Timing of Post-Secondary Education: Years of Education, Year of Start, Part-Time Status, Stopping Out, and Order of Institutions by Level of Educational Achievement, 1979. 36

1.6 Labor Force Status and Student Status of Phase IV Respondents by Sex and Marital Status, Spring 1979. 37

1.7 Starting Year of First and Current Full-Time Jobs, and Total Number of Full-Time Jobs by Level of Educational Attainment . . . 39

1.8 Geographical Mobility from Place of Residence while Attending High School to Present Residence Location 40

2.1 Comparison of (Unweighted) Phase IV Respondents and Nonrespondents along Selected Sociodemographic Variables. 51

2.2 Comparison of Phase IV Respondents and Nonrespondents along Selected Internal-Level Variables Using the T-Test Statistic. . . 52

2.3 A Comparison of Phase IV Mail and Telephone Respondents along Selected Variables. 53

2.4 Comparison of Phase IV Mail and Telephone Respondents along Selected Interval-Level Variables Using T-Tests 55

2.5 Representativeness: Estimated Population Parameters for the Grade 12 Cohort, Phase I and Phase IV 56

3.1 Type of High School Program by Selected Social Background Factors 72

3.2 Educational Outcomes by Type of High School Program 73

3.3 Athletic and General (Nonathletic) Participation in High School by Selected Social Background Factors. 74

3.4 Educational Outcomes by Participation in Athletic and General High School Activities 75

[illegible] Involvement in the Leading Crowd by Selected Social Background Factors 76

3.6 Educational Outcomes by Involvement in the Leading Crowd 77

3.7 How People Would Like to Be Remembered by Selected Social Background Factors 78

3.8 Educational Outcomes by How People Would Like to Be Remembered 79

3.9 General and Job-Related Usefulness of Education by Level of Educational Attainment 80

3.10 General and Job-Related Usefulness of Education by Selected Social Background Factors and Academic Performance 81

3.11 Level of Educational Attainment and Current Work Status by High School Program 82

3.12 Prestige, Starting and Current Salaries in Present Job by High School Program 83

3.13 Starting Salaries in Present Job by High School Program, Filtering on Sex 84

3.14 Starting Salaries in Present Job by High School Program, Filtering on SES 85

3.15 Starting Salaries in Present Job by High School Program, Filtering on Stratum 86

3.16 Starting Salaries in Present Job by High School Program, Filtering on Grades 87

3.17 Current Salaries in Present Job by High School Program, Filtering on Sex 88

3.18 Current Salaries in Present Job by High School Program, Filtering on SES 89

3.19 Current Salaries in Present Job by High School Program, Filtering on Stratum 90

3.20 Current Salaries in Present Job by High School Program, Filtering on Grades 91

3.21 Job Prestige by High School Program, Filtering on Sex 92

3.22 Job Prestige by High School Program, Filtering on SES 93

3.23 Job Prestige by High School Program, Filtering on Stratum 94

3.24 Job Prestige by High School Program, Filtering on Grades. 95

3.25 Importance of Various Personal Values by High School Program. . . 96

3.26 Personal Values Providing Most Satisfaction by High School Program 97

3.27 Personal Values Providing Least Satisfaction by High School Program 98

3.28 Broad and Immediate Cognitive Style Preferences by High School Program. 99

3.29 Evaluative, Potency and Activity Components of Self-Concept by High School Program 100

3.30 Sense of Fatalism by High School Program. 101

4.1 Enrollment in Post-Secondary Institutions by Selected Social Background Factors. 131

4.2 Enrollment in Post-Secondary Institutions, with High School Only Included, by Selected Social Background Factors. 132

4.3 Recruitment into Post-Secondary Educational Attainments from Gender Background, Socioeconomic Origins, and Stratum 133

4.4 Post-Secondary Educational Attainment Destinations from Gender Background, Socioeconomic Origins, and Stratum 134

4.5 Recruitment into Post-Secondary Enrollment from Selected Social Background Origins, Program in High School, and Level of High School Performance. 135

4.6 Enrollment in Post-Secondary Institutions by Program in High School Grades by Gender. .136

4.7 Recruitment into Post-Secondary Educational Attainment from High School Program and Level of High School Performance . .137

4.8 Post-Secondary Educational Attainment Destinations from High School Program and Level of High School Performance 138

4.9 Left Home to Attend Post-Secondary Educational Institution by Stratum. 139

4.10 Socioeconomic Status Origins by Stratum 140

4.11 High School Program by Stratum by Gender. 141

4.12 High School Program by Stratum by Gender Controlling for SES. . .142

4.13 Enrollment in Post-Secondary Institutions by Stratum by Gender Controlling for SES 143

4.14 Enrollment in Post-Secondary Institutions by 1973 Occupational Expectations by Gender. 144

4.15 Degrees Received by University and CAAT Graduates 146

4.16 Most Recent Majors Reported by Men and Women with University Experience. 147

4.17 Most Recent Programs Reported by Men and Women with Community College Experience. 149

4.18 High School Grades Compared to Post-Secondary GPA by Gender . . .150

4.19 Post-Secondary GPA and Last Institution Attended by Sex 151

4.20 Post-Secondary GAP by Program in High School by High School Grades. 152

4.21 Post-Secondary Degree Completion by Post-Secondary GPA and High School Grades by Gender. 153

4.22 First and Second Most Important Sources of Financing Total Costs of Post-Secondary Education by Enrollment 154

4.23 First by Second Most Important Sources of Financing Total Costs of Post-Secondary Education 155

4.24 First Most Important Sources of Financing Costs of Post-Secondary Education by Selected Social Background Factors 156

4.25 First Most Important Sources of Financing Post-Secondary Education by Socioeconomic Status and Enrollment. 157

4.26 Evaluation of Reasons Major or Program Was Selected by University and CAAT Enrollees 158

4.27 Mean Scores for Reasons Major was Selected by Major Category for University Students 159

4.28 Mean Scores for Reasons Program was Selected by Program Category for CAAT Students. 160

5.1 Comparison of Delay and Direct Groups on Selected Social Background Factors. 176

5.2 Comparison of Delay and Direct Groups on High School Participation, Grade Average, and Program 177

5.3 Comparison of Delay and Direct Groups on Self-Concept of Ability and Family Encouragement. 178

5.4 Comparison of Delay and Direct Groups on Parents' Educational Expectations, Proportion of Peers in Post-Secondary Institutions, and Degree of Uncertainty Concerning Financing Post-Secondary Education. 179

5.5 Reasons for Returning to Education: Delay Group. 180

5.6 Educational Attainment, Current Work, and Student Status by Interruption of Education 181

5.7 Starting, Present Salaries, and Present Job Prestige by Interruption of Education 182

5.8 Comparison of Delay, Direct, and No-Entry Groups on Selected Social Background Factors 183

5.9 Comparison of Delay, Direct, and No-Entry Groups on High School Participation, Grade Average, and Program. 184

5.10 Comparison of Delay, Direct, and No-Entry Groups on Self-Concept of Ability. 185

5.11 Current Work and Student Status by Interruption of Education. . . 186

5.12 Starting, Present Salaries, Personal Income in 1978, and Present Job Prestige by Interruption of Education 187

5.13 Likelihood of Enrolling in Post-Secondary Studies within Five Years and Interruption of Education 188

5.14 Present Work and Student Status by Student Withdrawal 189

5.15 Relationship of Student Withdrawal and Type of Post-Secondary Institution 190

5.16 Student Withdrawal and Reasons for Withdrawing the First Time. 191

5.17 Reasons for Returning to a Post-Secondary Institution after Stopping Out. 192

5.18 Student Withdrawal by Selected Social Background Factors. 193

5.19 Student Withdrawal by High School Participation, Grade Average, and Program. 194

5.20 Student Withdrawal by Self-Concept of Ability 195

5.21 Relationship of Student Withdrawal and Type of Post-Secondary Institution, Filtering on SES 196

5.22 Relationship of Student Withdrawal and Type of Post-Secondary Institution, Filtering on Stratum 197

5.23 Relationship of Student Withdrawal and Type of Post-Secondary Institutions, Filtering on Grade Average. 198

5.24 Starting, Present Salaries, Personal Income in 1978, and Present Job Prestige by Student Withdrawal. 199

5.25 Type of Present Work Firm by Student Withdrawal 200

5.26 Evaluative Potency and Activity Components of Self-Concept by Student Withdrawal 201

5.27 Sense of Fatalism by Student Withdrawal 202

5.28 Personal Values Providing Most Satisfaction by Student Withdrawal. 203

5.29 Personal Values Providing Least Satisfaction by Student Withdrawal. 204

6.1 Total Number of Full-Time Jobs by Job-Changing Status 247

6.2 Duration of First and Current Jobs by Educational Attainment and Job-Changing Status 248

6.3 Starting Year of First and Current Full-Time Jobs Compared to Last Year of Formal Education for Persons with Some Post-Secondary Education 249

6.4 First Full-Time Occupations by SES, Stratum, and Educational Attainment for Men and Women (Including Blishen Scores) 250

6.5 Current Full-Time Occupations by SES, Stratum, and Educational Attainment for Men and Women (Including Blishen Scores) 253

6.6 Occupational Stratum by SES, Educational Achievement, and SES with Educational Achievement Controlled by Sex. 256

6.7 Present Activities of Persons Not in the Labor Force by SES, Stratum, and Educational Achievement 1979 by Sex. 257

6.8 Average Blishen Scores, Starting Pay, and Current Pay for First and Current Full-Time Jobs by Educational Achievement by Sex. 258

6.9 Average Starting Pay and Current Pay for First and Current Full-Time Jobs for Year of Job Start by Educational Achievement 1979. 259

6.10 Underemployment of University and CAAT Graduates with Respect to First and Current Full-Time Jobs, Using the Estimated GED Levels of These Occupations 261

6.11 Blishen Scores and Current Pay before Taxes in Categories by Educational Achievement 1979 by Sex. 262

6.12 General and Job-Related Usefulness of Education by Last Institution Attended by Sex 263

6.13 Evaluation of University or CAAT Experience as Related to Work Obtained after Leaving Post-Secondary Education. 264

6.14 Evaluation of Courses in Major by Post-Secondary Enrollment, Degree Completion, and Enrollment by Sex. 266

6.15 Concern that First Job Related to Post-Secondary Education, and Extent of Such Relationship by Post-Secondary Educational Achievement 1979 by Sex 267

6.16 First by Second Most Important Reasons Perceived by Respondents as the Basis Employers Used to Hire Them for First Full-Time Jobs Following Education. 268

6.17 First Most Important Reason Perceived by Respondents as the Basis Employers Used to Hire Them for First Full-Time Job by Sex and Educational Achievement. 269

6.18 First by Second Most Important Reasons Perceived by Respondents as the Basis Employers Used to Hire Them for Current Full-Time Jobs Following Education. 270

6.19 First Most Important Reason Perceived by Respondents as the Basis Employers Used to Hire Them for Current Full-Time Job by Sex and Educational Achievement. 271

6.20 Perceived Match between Current Job and Educational Background by Occupational Stratum Controlling for Educational Achievement 1979 by Sex 272

7.1 Proportion Participating in Alternative Forms of Education. . . .282

7.2 Sources Used in Learning about Alternative Forms of Education . .283

7.3 Alternative Forms of Education by Sources Used in Learning about Them 284

7.4 Participation in Alternative Forms of Education by Socioeconomic Status. 285

7.5 Participation in Alternative Forms of Education by Stratum. . . .286

7.6 Participation in Alternative Forms of Education by Sex. 287

7.7 Participation in Alternative Forms of Education by High School Program. 288

7.8 Participation in Alternative Forms of Education by Grade Average 289

7.9 Participation in Alternative Forms of Education by Educational Attainment. 290

7.10 Participation in Alternative Forms of Education by Present Work Status 291

7.11 Participation in Alternative Forms of Education by Present Student Status. 292

7.12 Participation in Alternative Forms of Education by Starting Salaries, Current Salaries, and Job Prestige. 293

PREFACE

Almost everyone has something to say about education and jobs. Editors fill newspapers with articles and letters to the editor, taking every conceivable position on the place of education. One could not blame members of the general public for speaking with many voices when those more powerful do the same. Much is at stake. Education and jobs require major individual and societal commitments. Actions regarding education and work, whether individual or societal, are not easily reversible; they are spread over generations. The resources involved are significant, insofar as education and jobs demand major financial decisions.

When we address ourselves to education and work, we are dealing with a complex issue deeply embedded in our most important concerns. In this report, we have attempted to provided a fresh look at topics related to the links between people's education and their jobs. This study is an attempt to sort out the issues so that actions, whether on the part of citizens or governments, employers or institutions, may be better informed.

Our readers should be aware of certain special features of our study. We are fortunate to be reporting on a group of Ontario respondents, all of whom have Grade 12 in common and about whom we already have much information. Surveys were conducted on the same population while they were in Grade 12 and at two intervals shortly thereafter. This research background and the methodological aspects of the process of re-locating our original [illegible] population is reviewed in Chapters One and Two. These chapters also describe the methodological challenges of our present project and the resolutions we developed. Chapter One includes an overview of some of the salient characteristics of our respondents and a description of their educational and occupational activities after leaving high school. The relation of this study to those previously conducted is especially emphasized in the first two chapters.

As part of this present research, we asked our respondents to recall their high school years and to answer a series of questions important in gauging the link between schooling and work. Included is information on performance, activities, and personality, as well as respondents' assessments of the value of high school. The results of inquiry are presented in Chapter Three.

In Chapters Four and Five, we examine the post-secondary schooling of our respondents. Findings on who got what kind of education, grades received, records of completion, and ways in which this post-secondary schooling was financed are presented in Chapter Four. Gender and socioeconomic status, grades in high school, and geographical area of origin are introduced as key variables in gaining a perspective on the findings presented. Chapter Five is a study of the issues surrounding interruption of schooling after high school, withdrawals after commencing post-secondary programs, and rates of completion (in terms of degrees or diplomas). Again, we try to illuminate our findings by bringing a series of background factors into our analysis.

The major purpose of our work has been to explore the linkage between education and work; that is, we sought to understand more clearly the ways in which schooling has consequences for later experiences in the worlds of work and career. In Chapter Six we place this interest at center stage, and present our findings with respect to occupational prestige and salary, relating each to our background variables. Readers primarily concerned with the relation of work and education will find this chapter especially important.

Studying the results of the survey, we came upon an unexpected finding: educational agencies outside the community college and university systems serve as complements and/or alternatives for a significant proportion of our study population. In Chapter Seven we present findings on private vocational schools, adult education, apprenticeship, and short courses, and assess their importance for our respondents.

From the project's inception, we have integrated two major social science methodologies: the survey and the open, unstructured interview. In Chapter Eight "Speaking Out," a number of individuals give their own accounts of schooling and work on the basis of their own priorities. Many of the situations and issues addressed relate to those discussed in previous chapters; the individuals whose interviews are presented show how these issues emerge and are shaped by their unique lives. Included are commentaries on each interview, as well as a set of conclusions derived from the interview material.

Finally, we have prepared a set of highlights and conclusions. The highlights (located before Chapter One) are meant to aid those readers who wish to achieve a quick overview of some of the more interesting results. In Chapter Nine, we formulate a set of statements regarding equality of educational opportunity in Ontario, and present a set of specific recommendations based on our conclusions.

There are a number of persons and organizations to whom we wish to express appreciation. The staff of the Ontario Ministry of Colleges and Universities have been encouraging and helpful throughout. At the Survey Research Centre of York University, Freda Marsden and members of her staff have worked hard and intelligently, and under some pressure, to help complete the various phases of the research. David Bates, John Tibert, Bill Bruce, Mary Chiu Lam, Pierre Angers, and the Survery Research Centre interviewers, under the direction of Joan Roberts, deserve special mention. Noli Swatman of the York University office of Research Administration saw that our work was facilitated in a most efficient manner. The research of this project was greatly aided by a number of students enrolled in the York University Graduate Program. Among these, Norm Okihiro, who wrote Chapter Two and Appendix B, was especially helpful in organizing the statistical analysis; Carl James, Diane Boyce, and Gregory Vaz took on special interviewing tasks; Steve Arvay conducted pretests at Sheridan College; Pauline Chan helped with the analysis and editing of tables. Members of the Qualitative Methods class in 1978-79 became essential members of the research effort, and their involvement was contagious. Odette McLeod made sure that the administrative parts of this project were kept under control. There was no one more essential to the completion of this report than Audrey Robinson, who typed drafts and tables, and for her special effort we are most grateful. In the final weeks, the Faculty of Arts Secretarial Services, under the direction of Doris Brillinger, became essential to the completion of the report. Our acknowledgements would be incomplete if the unending patience and assistance of our wives--Etta, Carol, and Jane--were not mentioned. The support of several funding agencies is acknowledged in Chapter One. Finally, many other people contributed to the success of this study at its various stages and, though we have not acknowledged them directly, we wish to express our thanks for their help.

Research relied heavily on the goodwill and cooperation of our sample members. Without their enthusiasm, friendliness, and willingness to liberally provide us with time, the continued success of this project would have become problematic. We hope that we have earned their trust, and dedicate this report to them.

It should be clearly understood that the authors are solely responsible for the findings reported. Although the study is published under the auspices of the Ministry of Colleges and Universities, the views and recommendations expressed are those of the authors.

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Department of Sociology
December 28, 1979

HIGHLIGHTS

CHAPTER THREE: HIGH SCHOOL EXPERIENCES: LOOKING BACK AT THE EARLY SEVENTIES

* High school program plays an influential role with regard to level of post-secondary achievement. About 4 in 10 respondents who were enrolled in high school academic programs graduated from university, in contrast to 4.1% from commercial programs and 7.4% from technical or vocational programs.

* High school program selection is strongly related to one's socioeconomic status (SES) and regional background. Proportionately more respondents selecting academic programs come from higher SES backgrounds and the more urban regions (e.g., Toronto) of Ontario.

* Academic performance forms the most common basis of high school student subcultures, with over 3 in 10 respondents wanting to be remembered as a "brilliant student." A further 5 in 10 would like to be remembered as a "leader in activities" or "outstanding athlete" and fewer than 2 in 10 wanted to be remembered as "most popular."

* Majorities of university and CAAT graduates view their post-secondary education as having job-related usefulness. Five in 10 CAAT graduates and 2 in 10 university graduates assess their

education as being very useful to job and career. However, proportionately more university graduates evaluate their overall education as generally useful. These differences in perception are more effectively understood in terms of the varying socioeconomic and demographic characteristics of students enrolling in universities or CAATs.

* Starting and current job salaries vary by type of high school program. The spread increases from starting to current salaries. The current average salary is $12,589, for former academic program students, $11,244 for former commercial program students and $15,200 for technical or vocational program students. While those in the last group do very well financially, they occupy the least prestigious jobs, with an average Blishen score of 42.9. However, caution should be exercised in interpreting these relationships because the selection of high school program is influenced strongly by the demographic and social factors.

CHAPTER FOUR: POST-SECONDARY EDUCATION: GOING TO UNIVERSITIES AND COLLEGES

* Excluding the 14.3% currently enrolled, 47.1% of respondents indicated that it is very or somewhat likely that they would enroll in a post-secondary institution within the next 5 years.

* Of the 60% of respondents having contact with post-secondary education, half experienced university, 35% experienced CAAT, and 13.4% had experienced both.

home in order to pursue a post-secondary education. Insofar as these more rural regions are disproportionately populated by lower SES persons, there is a double hardship in terms of gaining access to a post-secondary education.

* The influence of region seems especially noteworthy in another respect: fewer high-status students in academic programs in the towns and rural areas went on to university than did youth from more urban areas. More went on to a CAAT or directly to work.

* Eight in 10 university students completed their degrees; 7 in 10 CAAT students completed their diplomas/certificates.

* Gender and major or program of study are strongly related in colleges and universities, indicating a kind of internal tracking based on sex.

* Grades in high school are moderately related to grades in post-secondary institutions, and both are positively related to degree completion.

* The main source of financial support for all post-secondary students is summer earnings, reported by almost 4 in 10 of our sample as being most important. Only 15% relied on the Ontario Student Assistance Program (OSAP) or Canadian Student Loans (CSL).

- Gender is related to the selection of post-secondary institutions. When men are examined, 57.1% chose only university, 30.7% chose only CAATs, and 12.1% enrolled in both types. The proportions for women are 39.2%, 46.3%, and 14.5%, respectively.

- Two in 10 CAAT enrollees were from the highest socioeconomic status (SES) level, compared with almost half of the university enrollees. CAAT enrollees are spread fairly evenly across the class structure, while university enrollees are drawn heavily from the higher SES groups.

- Any educational attainment group involving university drew more than half of its enrollees from the top two SES quartiles; graduate/professional schools drew almost 60% from the highest SES group.

- High school program has an effect independent of socioeconomic status with respect to educational attainment. Of the low SES persons who entered the academic program in high school, 70% went to post-secondary institutions.

- The rate of post-secondary educational experience varies strongly within the province; it is 74% in Toronto, 67% in other large and small cities, and 52% in towns and rural areas.

- Approximately 67% of young people living in the towns and rural areas of Ontario, and even in small cities, must expect to leave

- * Socioeconomic status bears a relationship to the importance of different sources of financing post-secondary education, with OSAP/CSL as the second most important source for the two low SES groups.

- * Low SES CAAT students rely less frequently on OSAP/CSL support than do low SES university students.

- * Parental financial support is also a significant source, since most students who rely on summer earnings as their first most important source relied upon parental support as the second most important source.

- * Summer earnings are more important as a financial source for urban-origin students than for rural-origin students, who are more dependent on OSAP/CSL. This suggests that good-paying summer jobs may be scarcer in small towns and rural areas than in urban centres.

- * In funding post-secondary education, men rely more frequently than women on summer earnings, whereas women are more dependent on parental support.

- * Students were offered ten reasons to express the basis for choosing their major or program of study. Of these, interest in the area, good employment prospects, high income prospects, and career advancement prospects were most frequently cited as very important or important. Nine in 10 university and CAAT students stated that interest in the area was important, 3 to 4 in 10 that high income prospects were important, and 5 to 6 in 10 that career advancement prospects were important. Seven in 10 CAAT enrollees emphasized good employment prospects, compared with 5 in 10 university students.

* University arts majors placed less emphasis on employment, income, and career prospects as reasons for selecting a major than did science, applied science, and business and economics majors. There were also differences between certain groupings of CAAT programs regarding reasons cited for program selection.

* When asked to evaluate post-secondary education in terms of general satisfaction, 8 in 10 former students indicated being very satisfied or somewhat satisfied. There were no differences by gender, socioeconomic status, or urban/rural origins; only individuals not completing degrees or who received low grades were less satisfied.

CHAPTER FIVE: INTERRUPTIONS OF SCHOOLING AND WITHDRAWAL FROM POST-SECONDARY INSTITUTIONS

* Of the major directions available to Ontario youth upon high school graduation, 46.2% enrolled directly in post-secondary institutions, 17.6% delayed entry for at least a year, and 36.2% chose an alternative direction.

- A comparison of the Direct- and Delay-entry groups revealed no significant social background differences. With respect to high school experiences, the only difference identified concerns participation in extracurricular general activities, members of the Direct group being more active than members of the Delay group.

- In exploring the consequences of delayed entry, proportionately more respondents who delayed their entry are currently enrolled in post-secondary institutions and, if currently working, occupy lower prestige jobs than respondents enrolling directly after high school graduation.

- The differences of social background and other experiences between Delay- and Direct-entry respondents are minimal; the strongest variations occur in a comparison of these groups with those respondents not continuing their education.

- Of respondents enrolled in post-secondary institutions, 26.4% had withdrawn at some stage; 55.8% of these withdrawals returned and completed their studies.

- Our data indicate a drop-out rate of 8.3% and a stop-out rate of 12.8% for respondents attending university only; the rates for respondents attending CAATs only are 25.0% and 8.4%, respectively.

- Academic factors largely accounted for student withdrawals. Over 5 in 10 student withdrawers left their post-secondary institutions for the following reasons: programs did not match personal expectations; instruction was perceived as poor; alienation with studies; and academic failure. Less than 1 in 10 withdrew for financial reasons, and fewer than 2 in 10 left for work-related reasons.

* Over 5 in 10 respondents who returned to their studies did so for general education reasons (e.g., desire to continue studies, obtain more training, obtain high degree, do better in school, satisfy parents' desires). A further 2 in 10 supplied job-related reasons (e.g., improve job opportunities, switch fields).

* In examining the relationship of withdrawal to social background and high school experiences, we find that drop-outs are less likely than nonwithdrawers to have come from higher SES bacgrounds, to have lived in large cities, to have obtained higher Grade 11 marks, and to have possessed a positive self-image.

* The differences between university and CAAT drop-out and stop-out rates are not substantially reduced by controlling on a number of respondent characteristics This would indicate that percentage differences between institutional types is more a function of factors within the institution than the self-selecting characteristics of our respondents.

* Nonwithdrawers now occupy the most prestigious jobs (an average of 53.0 on the Blishen scale); drop-outs occupy the least prestigious jobs (with an average score of 45.6).

- * Withdrawal influences starting salaries, with nonwithdrawers earning more; over time, however, the differences tend to converge. Part of the reason for this convergence probably lies in the fact that a larger number of drop-outs enter profit-making firms or start their own businesses, while more stop-outs become government employees.

CHAPTER SIX: THE LINK BETWEEN EDUCATION AND WORK

- * While socioeconomic status and other background factors are moderately related to the kinds of job and career beginnings of our respondents, gender and educational achievement are stronger as determining factors. Post-secondary education amplifies, in a sense, SES and other background differences. The choices of school and major or program aim a person towards a particular place in the occupational structure.

- * The segregation of the labor market on the basis of sex appears to have a profound impact on the kinds of jobs men and women obtain after completing their education. The majors and programs that men and women take in post-secondary institutions seem to feed into, and reinforce, the sex segregation of occupations.

- * The modal years of first full-time job entry for our sample are 1978 for university graduates, 1976 for CAAT graduates, and 1973 for those individuals with no post-secondary education. Modal years of current full-time job entry are 1978 for university graduates, 1977 for CAAT graduates, and various years for those with no post-secondary education.

- With respect to current full-time jobs, 47.6% of men are found in white-collar occupations and 47.7% in blue-collar work, whereas 91.0% of women are in white-collar fields. In white-collar fields, men tend to concentrate in the categories of natural sciences, engineering and mathematics; clerical and sales work; and managerial, administrative, and related occupations. Women tend to be found in the categories of medicine and health; the social sciences; teaching; and clerical and related jobs. Of women in our sample currently employed, 57.4% are in clerical work.

- Seven in 10 men originally from small town and rural areas still live in such parts of Ontario (in contrast to 56.2% of rural-origin women). The lower SES origins of rural persons and the more limited white-collar job opportunities in these areas are revealed in the current occupations of small-town and rural-origin men, who tend to be more frequently in blue-collar work (including farming) than men of urban origins.

- With regard to current jobs, 8 in 10 university degree men are found in white-collar work, with a heavy concentration in the category of natural sciences, engineering and mathematics (3 in 10). CAAT degree men are also largely in white-collar work (6 in 10); men with no post-secondary education are mainly in blue-collar jobs (7 in 10).

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* Women in the labor force are in white-collar fields, irrespective of educational achievement. Of university degree women, 42.4% are in clerical and sales work; 11.7% in teaching; 10.3% in natural sciences, engineering and mathematics occupations; and 9.1% in medicine and health occupations. Of women CAAT graduates, 41.5% are in clerical and sales work, and 33.8% are in medicine and health areas. Of women with no post-secondary education, 84.6% are in clerical and sales occupations.

* At the higher levels of educational attainment, men more easily than women obtain the higher prestige, upper-level white-collar jobs, whereas at the lower levels, women do better than men in terms of occupational prestige, shunning blue-collar work and opting for clerical and sales jobs.

* Relating income to educational attainment is inconclusive in our survey because the university graduates have entered the labor market only very recently, on average. Many high-school-only individuals have been in the labor market for up to six years, and there is no post-secondary education group in our sample can be compared with this group.

* High-school-only men whose current jobs date from 1978-79, on average, earn $945 annually more than university graduates entering the job market in the same years; for high-school-only women, compared to university degree women, the earning difference is $628 in favor of the former group. University women earn, on average,

20% less than university men, whereas high-school-only women earn 30% less than high-school-only men (1978-79 current job beginnings).

- A measure of underemployment, based on average General Educational Development (GED) scores by occupational unit group numbers, shows underemployment rates in current jobs of 42.0% and 56.1% for men and women university graduates, respectively.

- When asked which aspects of the post-secondary educational experience were most valuable in preparing one for work after leaving school, 7 in 10 CAAT students, but 5 in 10 university students, believed that their major courses were very valuable or valuable.

- Questioning the value of courses in preparing one for work turned out to be associated with whether or not one graduated. Three-quarters of university graduates thought their major courses valuable in preparing them for work, but only 50% of nongraduates expressed this view. Similarly, CAAT graduates were more positive than nongraduates in assessing the value of the program for work. Obtaining high grades at university or a CAAT also predisposes one to evaluate major courses or program as a benefit to later employment.

- When asked how concerned they were that their education be related to their jobs after leaving school, majorities of university and college graduates reported retrospectively that they had been very concerned or concerned. CAAT graduates showed greater concern than university graduates, and women showed greater concern than men.

- The lack of jobs related to major or program of study was the main source of difficulty reported by respondents who had difficulty obtaining program-related work after completing post-secondary education.

- Men and women with all kinds of educational backgrounds most frequently believed that "personality or how you presented yourself" had been the main criterion used by their employers in hiring them for first full-time and current jobs. "Educational qualifications" was the next most frequently mentioned criterion.

- Respondents were asked if their current job matched their educational background. Lack of fit between education and work was perceived by 53.6% of university graduate men and 58.0% of university graduate women. Lack of fit was perceived by 49.7% of CAAT graduate men, but by only 31.0% of CAAT graduate women.

CHAPTER SEVEN: ALTERNATE FORMS OF EDUCATION

- More than 4 in 10 respondents participated in short courses, adult training, or apprenticeship programs after leaving high school.

- Two-thirds of respondents learned about such programs through five sources (in decreasing order of importance): employer, newspaper ads, advice from friends, mailed flyers, and school calendars.

- Approximately 60% of respondents enrolling in private vocational schools, adult training programs, or apprenticeship programs have lower socioeconomic status backgrounds.

- A disproportionate number of respondents enrolling in private vocational schools come from large or middle-sized cities, while more persons enrolled in adult training or apprenticeship programs come from towns or more rural areas of Ontario.

- Enrollment in alternative educational programs and traditional post-secondary programs is not mutually exclusive; over 50% of those once enrolled in private vocational schools or adult training programs were enrolled at some time in university or college, and 3 in 10 received degrees of certificates.

- Respondents who had been enrolled in apprenticeship programs currently earn an average of $14,955.00, or more than $2,000.00 above the average of all groups ($12,877.00). Respondents with private vocational school or adult training backgrounds earn within $50.00 of the general average for those currently working full-time. It should be noted, however, that those with apprenticeship background occupy jobs with the lowest prestige (an average Blishen score of 41.8), while other alternative education groups are close to the average (48.4) of all those currently working.

CHAPTER ONE

INTRODUCTION: PROJECT BACKGROUND, STUDY DESIGN, AND SAMPLE DESCRIPTION

BACKGROUND

In North America there is a growing body of scholarly work in economics, sociology, and psychology based on longitudinal surveys. Following individuals or groups in time has the advantage of revealing some of the dynamics of social process that can only be inferred or conjectured using other techniques. Thus, experiences of men and women in the labor force, labor-supply responses to welfare innovations, fertility behavior, occupational mobility between generations, and the impact of college and university education have been studied using the longitudinal survey. In this longitudinal study we report the findings of a panel survey of former Ontario Grade 12 students, focusing on educational and occupational attainment, topics of timely policy concern and analytical interest to the social sciences.

In the fall of 1977, the authors of this report began to explore the possibility of turning Prof. Paul Anisef's earlier study of Ontario Grade 12 students into a longitudinal survey. Since almost five years had passed since the first phase of his enquiry into the educational and occupational aspirations of a sample of high school youth, and most of this group had entered the labor market, it appeared opportune to examine the link between education and the labor market. In *The Critical Juncture* (1975), Prof. Anisef carried out an eighteen-month follow-up study examining post-secondary educational choices; this same group would be followed again in the spring of 1979, six years after the original study, with the focus on levels of education attained and jobs and careers started.

The origin of this present research dates back to 1972. At that time, though university enrollments were still growing, applications for enrollment in universities had begun to decline and the projection of enrollments, based on trend data, was proving increasingly inaccurate. The Ontario Ministry of Colleges and Universities (MCU) became interested in monitoring the attitudes and behaviors of high school students with respect to educational plans, and approached Prof. Anisef to conduct a study of high school seniors. On the basis of a grant from MCU, a sample survey of Ontario Grade 12 students was to be undertaken in the spring of 1973. Prof. Anisef would be responsible for the development of the questionnaire and final data analysis, and the Survey Research Centre (SRC) of York University's Institute for Behavioural Research would be responsible for sample design and data collection, this study being subsequently designated Phase I.

Assessing the educational intentions of Grade 12 students provokes curiosity about what further education these young people obtained after high school. Since MCU wanted to know if trends in behavior could be anticipated on the basis of intentions, it sponsored two subsequent follow-up studies under the direction of Prof. Anisef, with the field work conducted by York University's Survey Research Centre. Phase II was a telephone survey, carried out in November of 1973, which inquired about present activity, plans for the fall of 1974, reasons plans indicated in the first survey might have changed, and other questions.

This study showed that many of the former Grade 12 students had entered the labor force, and some had begun attending community colleges. The second follow-up, Phase III, was carried out in October and November of 1974, some eighteen months after the first survey, its purpose being to compare career aspirations indicated in the two earlier surveys with their realization. It was expected that most of the young people who desired post-secondary education would have begun university or enrolled in a community college.

In a sense, the implementation of a third follow-up study is a tribute to the success of Ontario's post-secondary educational institutions in providing educational opportunity on a large scale for the province's young people. In the 1970's, some quarters of the public expressed a concern that too many highly trained young adults were being readied for a job market requiring fewer such personnel because of slower economic growth. Some people even questioned the usefulness of post-secondary education in preparing young people for jobs. Since limited information existed that would establish the link of education to the labor market, further research was indicated.

The authors were aware that no panel study of Canadian youth had ever been done.[1] There have been studies of aspirations and expectations of high school students, studies of who goes to colleges and universities, and studies of first jobs of university graduates, but there have been no studies that followed a cohort of students and charted their experiences in going from school to work. The study reported here is a first in Ontario--comparing the educational and work experiences of youth from different social backgrounds and different parts of the province. One advantage of Phase IV is that we could obtain very specific new information, since we already had considerable general information on our respondents.

RESEARCH PROBLEM

Research into the links between education and the labor market is relevant in three respects. It can be treated as documentation, providing information about what has happened to people in an important stage of their life cycle. Moving from school to work is often a difficult experience for young people; it involves fashioning a commitment to work roles that will reflect one's personal identity. Such a step is taken in highly evaluative context, since, in our society, work and income are largely the social basis for the definition of success. In the data we have obtained from our respondents, there is a wealth of factual information on the process of occupational choice, information most of us have only in the fragmented forms of biographies of friends and relatives.

We have already indicated several of MCU's policy interests in sponsoring this research and its earlier phases. There is, however, a larger concern. While concern for education as a resource for the economy rises as economic growth moderates and changes, an enduring issue has been that of equal opportunity of access to post-secondary education for residents of Ontario. Historically, in Ontario, there has been a commitment to provide advanced education for individuals who desire it. This education can take many forms: evening school short courses, apprenticeship training, two- and three-year college programs, or advanced degrees at universities.

A concern with accessibility should extend beyond the problem of entry into post-secondary institutions. Persons entering universities and/or colleges of applied arts and technology (CAATs) bring with them varying perceptions of the educational objectives associated with their chosen institution. We may assume, for instance, that students choose programs to optimize their career choices. The nature of choice, however, may vary with the socioeconomic backgrounds of students and their situational experiences before entry. At the subjective level, it is necessary to assess former post-secondary students' perceptions of how they selected programs and majors in terms of their job plans, and how concerned they were about this relationship. We then need to compare subjective evaluations with the more objective features of first and current job selection (e.g., extent of underemployment as measured by formal educational job requirements).

The four phases of research on former Grade 12 students speak directly to many specific questions of government policy planning. It is useful to outline some of these.

Earlier Phases

-educational and occupational aspirations of youth

-future education and work plans (as a form of consumer demand)

-information sources relating to college and university entry, as perceived by students

-in-province versus out-of-province enrollment plans

-year of intended enrollment in post-secondary educational institutions

-perceived financial resources for meeting the costs of future education

-reported sources of financial support, if attending a post-secondary educational institution

-reasons for attending university or community college

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-gender of student

-social background of student: socioeconomic background (based on parental occupations, parental levels of educational attainment, and family income); nationality and ethnic origin; religion

-urban or rural residence of student

Phase IV

-current labor-force status of respondents

-current student status of respondents

-program or track in high school previously attended

-use of alternative forms of post-secondary education and how this occurred (includes private vocational training, adult training, apprenticeships, short courses)

-educational achievements by 1979

-whether post-secondary education was terminated by withdrawal or only broken by temporarily stopping out, and reasons for interrupting education in these ways

-shifting between university and community college

-frequency of part-time studies

-completion of degrees, diplomas, and certificates

-fields of post-secondary studies

-cumulative grade point average in post-secondary studies

-evaluation of reasons for selection of major or program of study

-the need to leave home in order to pursue post-secondary education

-retrospective evaluation of sources of financial support while undertaking studies

-perceptions of post-secondary goals and objectives

-perceived value of education for employment after leaving school

-nature of first full-time job (occupation, kind of firm, pay)

-length of tenure for first full-time job and reasons for leaving it

-nature of current full-time job

-how current full-time job was obtained

-current job satisfaction

-perceived criteria used by employer in hiring respondent for first and current job

-further training given on first and current job

-extent of underemployment among graduates

Since equal opportunity has been a main concern in post-secondary educational policy, it was important to identify certain socially significant subgroups in our sample. Subgroups based on gender, socioeconomic status (SES) and urban/rural origins were obtained from our data on the bases of the original sample design and information provided in the Phase I questionnaire. Given these subgroups, we have been able to examine social background factors in relation to high school program, institution and program selection at the post-secondary level, and patterns of withdrawing and stopping out. Thus, we could explore in some detail the question of accessibility to post-secondary education for our sample of former Grade 12 students.

Similarly, we were able to examine how social background factors and the role of high school program and grades relate to the processes of entering the labor market directly, and pursuing post-secondary education before entering jobs and careers. We have been able to examine how respondents perceived their education (whether in intrinsic or instrumental terms), whether they felt their education was being utilized in their work, to what extent they were satisfied by their education and jobs, and whether more education was planned. Finally, we have been able to examine our subgroups in terms of the results of education: the kinds of occupations respondents have obtained, their occupational prestige, and salaries.

In addition to the descriptive and policy dimensions of our longitudinal study, there are important social science interests to be served. Social science has long been interested in understanding how a society's social institutions and the structure of social inequality they embody determine the life chances of individuals in society. Such concerns have been formulated into different theoretical paradigms that offer alternative explanations for such structured inequality.

Within sociology, for example, at least two views have been expressed to interpret the role of educational institutions in relation to the economy and society. One view, which might be termed the "functionalist" or "meritocratic" view, suggests that an open system of education--one maximizing accessibility, especially at the post-secondary level--will promote the general good by making it possible for individuals to achieve a great deal of social mobility through their own efforts in obtaining high levels of education. This perspective has a parallel in economics. Human capital theorists have advanced the idea that the productivity and technological advancement of industrial society could be promoted by general increases in the level of education, in particular, the production of highly trained manpower. An alternative perspective, which might be labelled the "critical" view, while not denying the opportunity offered by an open system of education, stresses the reproduction of structured social inequality; educational institutions are seen as part of a process of social sorting that recreates inequality rather than ameliorating it.

While this study is not designed to prove one theory wrong and another right, we have formulated our research design to provide information to social scientists who wish to explore whether empirical findings give support to hypotheses that can be derived from competing perspectives. Needless to say, the authors of this report intend to employ the data from this survey to illuminate some important issues in the field of Canadian sociology of education in future papers.

RESEARCH DESIGN

Background

In developing the design of the Phase IV follow-up, the principal investigators had cause to evaluate the previous three phases. The review led to one immediate conclusion; use of a survey approach had yielded a wealth of information (e.g. social and social-psychological), and the possibility of generalizing to the larger population of Ontario youth. Moreover, the relatively large number of sample respondents afforded us the opportunity to evaluate rather complex relationships.

One major disadvantage of relying exclusively on a survey approach is that the individual becomes lost in the technological process of computer analysis. To discover how the respondent considered and related to his educational and work worlds, and how he developed strategies to arrive at decisions regarding them, required the use of nonsurvey, qualitative techniques. It was decided to select a subgroup of 100 respondents, primarily from the Metropolitan Toronto area and including a dozen persons from small towns in eastern Ontario. Unstructured interviews were then held with these persons. From this subgroup, a smaller group was selected for further in-depth interviews. This methodology (shortly to be reviewed in greater detail) fulfilled a number of objectives. In the first place, it represented our conviction that, for the overall understanding of themes and topics treated in this report, we needed to focus on the particular and special ways in which each person deals with such topics. Secondly, we felt that we might be able to ask more suitable questions in the mailed questionnaire if we had previously discussed the relevant topics with individual respondents. Finally, this particular research strategy of highlighting individual responses would provide the policy maker with concrete illustrations of the generalizations developed in Chapters Three through Seven.

Review of Survey Methodology

The preliminary stage of the survey research design began in the summer of 1978. Seed money (provided by York University Faculty of Arts and a York Senate-administered Social Science and Humanities Research Council block grant) enabled us to begin tracing the former Grade 12 students. A one-page questionnaire was sent to parents to update names and addresses and to provide preliminary information on the education, employment, and marital status of our participants.

A proposal submitted to the Ministry of Colleges and Universities in July 1978 was accepted at the end of August, and the Survey Research Centre began telephone tracing to locate parents not reached in the preliminary stage. Reminder letters and questionnaires were sent to parents who had not yet responded. A final effort to reach nonrespondent parents involved telephone contacts; this occurred in early September.

Parental questionnaires were then coded and keypunched, and a computer tape was prepared by the Survey Research Centre in the latter part of September. These questionnaires were analyzed in the next two months and an interim report, based on this analysis, was submitted to MCU at the end of November 1978.

Actual questionnaire construction occurred between November 1978 and March 1979. The development of items included in our final draft resulted from: analysis of parental questionnaires; analysis of other related questionnaires, primarily American; discussions with colleagues having expertise in the areas of education and work; and discussions with MCU officials. In March, a draft questionnaire was prepared and pretested by the Survey Research Centre. A meeting was then held with the pretest interviewers to address problems with specific items. At the beginning of April, a shortened version of the final questionnaire was ready to be mailed.

One major focus of concern involved the rate of response we could anticipate to our mailed questionnaire. After some deliberation and consultation, three strategies were employed in an effort to increase response rate. An explanatory letter from Mr. Benson A. Wilson, Assistant Deputy Minister of the Ministry of Colleges and Universities, was sent three weeks prior to the questionnaire. A package was sent with the questionnaire in mid-April, and included a cover letter from the principal investigators, a reprint of a York University Gazette article (March 30, 1979) summarizing the project objectives and previous findings in Phases I-III, and a dittoed sheet requesting help in locating former classmates who had not been located through other tracing procedures. Three weeks later (May 18-May 22) reminder cards were sent to all nonrespondents. Beginning June 10, in accord with a previous agreement with the Survey Research Centre, nonrespondents were called by trained interviewers. A shortened version of the mailed questionnaire was developed for this purpose (discussed in Chapter Two).

The coding and keypunching of questionnaire data began in June and a cutoff for processing incoming questionnaires was set at July 20,

1979. An edited computer tape was made available by the Survey Research Centre in mid-August and included information on 1,522 respondents.

Review of Qualitative Methodology

One hundred persons, selected from the larger sample of former Grade 12 students, were sent a letter asking if they would consent to interviews. The interviews occurred in conjunction with a York University sociology graduate course in qualitative methods; fourteen students received four training sessions before entering the field. Basically, interviews were informal rather than structured; tapes were used to record the conversations. In the Toronto area, the largest proportion of interviews was held at York University and the second largest at respondents' homes. Interviews also took place at pubs, offices, and restaurants.

The choice of an open-ended interview format (although each interviewer had a series of guide questions to aid in awkward interactions) provided the respondent with an opportunity to tell his or her story. In this situation, the respondent exercises greater control over what emerges than he or she could by responding to a mailed questionnaire or formal telephone interview. The face-to-face situation permits the respondent to tell the interviewer of his or her interests, the importance of these interests, and the strategies for dealing with specific personal problems. Most important, the interviewer is able to gain a sense of the particular, individual ways in which each respondent approaches the research concerns of the project (e.g. selection of an education or job).

On February 14, 1979 an all-day symposium was held at York University to pool different aspects of the qualitative interviews. Thus, the context of the interviews and its influence on interpreting the interviews were discussed. The content, or themes emerging from interviews, provided a second focus. Problems surrounding the development of a good interview became the center of a discussion of problems in qualitative methodology.

Prof. Gottfried Paasche then completed an intense analysis of the written transcripts of taped interviews. In many instances, it was necessary to play back individual tapes, as verbal nuances were not captured in the written accounts. The eleven cases presented in Chapter Eight represent a meaningful cross section of the in-depth interviews and an effort has been made to present a holistic analysis of each case. Although each of the eleven individuals interviewed may have defined education or work situations, etc., in a unique manner, the reader may recognize an identifiable type of person. It is hoped that the dual use of survey and interview will illuminate the topics discussed throughout this report in ways not possible if only one research strategy had been employed.

HOW TO READ THE TABLES

The analysis in Chapters One through Seven is based solely on the information gathered from 1,522 respondents in spring 1979. In Chapter Two we show that the 1,033 nonrespondents are moderately similar to those who responded on criteria salient to the report. It should be noted, however, that gender and educational plans developed in the fall of 1974 are two exceptions. Thus, males tend to be underrepresented and respondents with university aspirations overrepresented in Phase IV; respondents characterized by a high degree of educational indecision are slightly underrepresented.

Cross tabulations are based on a weighted sample size of 1,522. This size gives the means and proportions which approximate those found in the target population. The weighted sample, in effect, permits the analyst to adjust for errors or deviations from the unweighted sample to the population. At the same time, using the weighted sample size of 1,522 (rather than the practice, in previous reports, of employing a weighted sample size approximating the target population) allows us to assess the statistical significance of the tables. (See Chapter Two and Appendix A for a more detailed exploration of this procedure.)

Unless otherwise specified, most tables appear at the end of each chapter; a sample table is shown here.

TABLE 5.8: COMPARISON OF DELAY, DIRECT, AND NO-ENTRY GROUPS
SELECTED SOCIAL BACKGROUND FACTORS

SOCIAL BACKGROUND

Nature of Entry	Sex		SES				Stratum			
	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Delay	17.8	17.5	13.3	15.8	18.6	22.6	18.5	17.2	20.4	15.3
Direct	45.4	46.9	35.2	40.7	43.6	64.3	54.8	48.3	47.2	38.1
No Entry	36.8	35.6	51.6	43.5	37.9	13.1	26.7	34.5	32.4	46.6
TOTAL (N)	727	795	381	350	332	388	340	333	359	490
Significance (p)		N.S.								

Each table contains column percentages read down the column. In Table 5.8, for example, the first section deals with the relation of sex and nature of entry into post-secondary institutions. For males, 17.8% delay, 45.4% enter directly, and 36.8% do not enter post-secondary institutions. This totals up to 100%. For each column of a table, we provide the number of respondents (Total (N)) located in that column and upon which the percentages are based. When these percentages are compared with those for females, we find the statistical comparison is nonsignificant (N.S.). In section two of Table 5.8 (dealing with SES), the relation is statistically significant with at least a (p) .01, and we adopt the convention of not reporting the (p) value where (p) is less than .01. In other tables, the reader will note that when (p) ranges in value from .02 through .09, the precise value of (p) is reported in the table, being interpreted as tending to approach statistical significance. It should also be noted that the chi-square statistic is employed in working with proportional (percentage) differences, and the T-test or F-test when working with average or mean differences among statistical groups. Presenting the data as column percentage, as in sample Table 5.8, should be interpreted as testing the hypothesis that sex determines or causes the nature of entry. In the sample case, the relationship is not substantiated because it is not statistically significant; but clearly, socioeconomic status, indicated in the adjoining columns, does relate to entry.

Percentages in such a table might be presented in two other ways. Firstly, we might have indicated the row percentages. In the sample table we might have indicated that, of the respondents who delayed entry into post-secondary institutions, 48.1% were males and 51.9% were females. The fact that more females delayed entry than males is a new kind of information not given by the column percentages; however, it should be treated as descriptive information, rather than indication of a cause-and-effect relationship. Generally, we have not developed tables with row or descriptive percentages because we felt that the testing of hypothesis is of greater value. However, the reader can obtain the other kind of information by simple calculation.

Percentages might have been presented by dividing cell frequencies by the grand total of cases. Thus, of all males and females (1,522), men who delayed entry account for 8.5% of the total, females who delayed entry account for 9.1% of the total, and so on. Such percentages, based on the grand total (sometimes called "corner" percentages), indicate the incidence of a phenomenon. In this report we have not presented such percentages; incidence percentages are useful for highlighting relationships, but, for the sake of brevity, we have not adopted them for general use.

Finally, it should be mentioned that the use of weighting, based on employing the computer procedures available in the Statistical Package for the Social Sciences (SPSS), leads to slightly larger rounding errors than for unweighted data; we have attempted to minimize such rounding errors in developing our tables.

In presenting percentages in this report, we have adopted the following convention. References to 18%, or 2 in 10 cases, or one-third of individuals are not exact figures, but are approximations rounded up or down to be as close to the exact percentage as possible. This has been done to improve readability. When a figure is given with a decimal point, such as 20.3%, it refers to an exact percentage taken from the table indicated in the text.

WHAT HAS HAPPENED TO THE GRADE 12 STUDENTS?

Of the original 2,555 Grade 12 students surveyed in the spring of 1973, we were able to contact and survey 1,522 in the spring of 1979, six years later. What, in general, has happened to these young people in that period of time? What kinds of education and jobs have they obtained? Did they fulfill their personal expectations regarding education? These and other questions will be touched on briefly at this point. Our intention is to give a brief overview of what has happened to our sample members, as background to the more detailed analyses of outcomes to follow.

Age and Marital Status

Assuming that most of our sample were five years of age in September of 1960, when they entered kindergarten, most of our sample would then be born during the first eight months of 1955, and would be 24 years of age at the time of our most recent follow-up study. In the fall of 1974, 2.7% of the men were married (0.3% separated), as were 9.8% of the women (0.2% separated). Table 1.1 indicates the marital status of our sample today, showing that half of the men are single and one-third are married, with two-fifths of the women being single and almost half being married.

The Crossover Table Extended

In The Critical Juncture (1975), a crossover table was presented which related educational and vocational expectations of adolescents in the spring of 1973 to their reported behavior in the fall of 1974. This table showed clearly that, for individuals, actions often differed from expectations, though aggregate category changes were less discrepant. For example, persons expecting to go on to university, but who did not do so, were almost equally replaced by persons who planned some other activity, but then went on to university. We have extended this original crossover table to indicate the educational attainment of our sample to date, and to show how behavior may, in the long run, relate to original expectations.

Table 1.2 shows the educational achievement of our six-year follow-up sample. It indicates that 6.4% of the sample remain in graduate or professional schools, 20.4% graduated from university, 6.0% completed some university but did not graduate, 16.5% graduated from a CAAT, 6.0% attended CAATs but did not graduate, 8.6% had combinations of university and CAAT degrees and/or university and CAAT experience, and 36.2% had only secondary education. Men differ from women in only a few respects. While as many men as women graduated from university, more men had some university but did not graduate; women graduated much more frequently from a CAAT than men (20.1% compared with 12.5%, respectively).

Thus, almost two-fifths of our sample had only a high school education, almost one-third had some contact with a CAAT, two-fifths had some contact with a university, and less than 1 in 10 had some combination of university and CAAT experience. The 41.4% who had some contact with university is somewhat larger than the proportion who enrolled in university in the fall of 1974 (35.3%)[2], and larger than the proportion who planned to attend university in the spring of 1973 (30.4%)[3]. The 31.1% who had contact with a CAAT is also larger than the 22.3% who planned to enter a CAAT (or nursing school) in the spring of 1973, and is much larger than the 14.4% who were enrolled in a CAAT (or nursing school) in the fall of 1974, indicating that many persons who had contact with a CAAT often delayed enrollment.

We have termed the group that did not go on to university or community college the "no post-secondary education" group. (This label will be retained in the rest of this report for purposes of discussion.) Within this group, some individuals obtained alternative forms of education following high school, such as private vocational school experience, adult training, apprenticeship, and other short courses. Table 1.3 gives the breakdown of these forms of alternative education by our main educational attainment groups. We shall focus specifically on them in Chapter Seven.

Table 1.4 is the updated crossover table on the 1,185 persons for whom we have information on spring 1973 expectations, fall 1974 actual activity, and spring 1979 educational attainment. The rows of this table refer to expectations in 1973, and the columns to fall 1974 activity. Educational attainment in 1979 is tabulated within each cell of the table, giving frequencies for:

1. individuals who graduated university (GU), (includes those currently enrolled in graduate or professional schools, those who graduated from a university and a CAAT, and those who graduated from university and had some CAAT experience);

2. some university (SU), (includes respondents with both some university and some CAAT experience);
3. graduated CAAT (GC) (includes those with a CAAT degree and some university experience);
4. some CAAT (SC);
5. high school only (HS).

Frequencies are presented because many of the numbers in the cells are small; however, summary percentages are given in the margins of the table. Cells are numbered for easy reference in the text and each cell gives the corner percent (based on an N = 1,185) for the total within the cell (as in Table 1.5 on p. 18 of The Critical Juncture (1975).

In summary, the expectation of taking a job is highly predictive of immediate entry into the labor force after high school, with little post-secondary education. When there is further education, it is at a CAAT and usually occurs after some job employment. The expectation of continuing one's education, but going to work in the fall of 1974, is also highly predictive of continued working and no post-secondary education. An expectation of going to university is highly predictive of entering university, and attendance at a university in the fall of 1974 is, in turn, highly predictive of university graduation. The expectation of attending a CAAT predicts CAAT attendance in 6 in 10 cases, but 2 in 10 high school students with a CAAT expectation eventually went to university Students who expected part-time studies were not generally part-time students in the fall of 1974; rather, 3 in 10 were attending a university or community college. By 1979, only 5 in 10 of those with original part-time studies expectations had had a university or CAAT experience.

Referring to Table 1.4, it is clear that the expectation of getting a job at the end of Grade 12 (cells 1-5) is highly predictive of immediate entry into the labor force and no contact with post-secondary education. Thus, 83.8% (N = 240) expected to work and were working in the fall of 1974. Of those, only 12.1% eventually obtained some form of post-secondary education; when further education was obtained it was graduation from a CAAT (15 out of 29 cases). The fact that most of these CAAT graduates were working in the fall of 1974 (cell 1) indicates that they returned to school later.

There were also a number of students who planned on further education or part-time study, or an alternative activity (cells 6, 11, 16, and 21), but who were working in the fall of 1974, a proportion about equal to those who expected and did work (for a total of 37.0%). Working in the fall of 1974, but with other original expectations, appears to be somewhat predictive of continued work and little contact with post-secondary education. Once working, 63.7% (N = 237) did not obtain further education. Of the 86 persons (36.3%) who did go on for further education after initially working, there were varied educational destinations: 51 went to a CAAT and 32 graduated; 35 went on to university and 18 graduated. Thus, though taking a job after finishing high school appears to lead individuals away from post-secondary education, having an earlier expectation of post-secondary education works, in one-third of the cases, to bring people back to education at a later date.

As cells 6 through 10 of Table 1.4 indicate, the expectation of going to university is highly predictive of enrollment. Of those expecting to enroll, 79.1% did so; 66.2% graduated with 12.9% completing several years of university, but not graduating. Attendance in the fall of 1974 indicates a stronger guarantee of graduation (cells 2, 7, 12, 17, and 22). Of the 435 attending university in the fall of 1974, 79.8% graduated, with an additional 15.9% attending but not graduating. Intentions and behavior, however, do not account for all those attending university. Of those who neither planned nor began university in the fall of 1974 (N = 632), 7.9% attended or graduated university--a very small proportion. Of the few who planned part-time study in the spring of 1973, 31.4% had some university contact by 1979, though hardly any began part-time study in the fall of 1974; of those who planned an alternative activity (persons neither working nor going to school), 31.4% had some university contact by 1979; of those who planned to attend a CAAT, 22.3% attended or graduated university.

The expectation of attending a CAAT is indicated by cells 11 through 15 of Table 1.4; 58.2% of students who planned to attend a CAAT did so by 1979 (45.4% graduating and 12.8% attending, but not graduating). Compared with the intention to go to university, the intention to attend a CAAT is less predictive of actual behavior, largely because 22.3% of these potential CAAT students obtained contact with a university. (Thirty-four of the 61 students in this situation were enrolled in university as early as the fall of 1974.) Attendance at a CAAT in the fall of 1974 is a strong predictor of program completion, since 71.2% of these students (cells 3, 8, 13, 18, and 23) graduated CAAT and an additional 7.9% graduated university. Of those who neither planned nor began attending a CAAT in the fall of 1974 (N = 853), 9.0% eventually attended or graduated. Of the few who planned part-time study in the fall of 1974, 19.6% had some contact with a CAAT by 1979 (a much smaller proportion than had university contact); of those who planned an alternative activity, 20.3% had some contact with a CAAT by 1979 (again, fewer than had university contact).

It should be noted that in the spring of 1973 only 4.3% of the sample (as shown in Table 1.4) planned to be part-time post-secondary students. This percentage underestimates the extent of eventual part-time studies, as we shall see later in our discussion of the timing of education. Student withdrawal is considered in detail in Chapter Five.

The Timing of Post-Secondary Education

Part B of the Phase IV questionnaire concerned the post-secondary educational experiences of our respondents. This section began by presenting respondents with a table to fill out; they were asked to indicate by year, beginning with 1973-1974, the institutions they had attended, whether they had been part-time or full-time students, whether they had received a degree that year, and their main field of study. With this table, we were able to reconstruct an educational history for each respondent and thus, examine kinds and length of post-secondary education. Table 1.5 summarizes some of the results.

The great majority of individuals pursuing graduate or professional education showed a conventional pattern of post-secondary education--completion of Grade 13, and university attendance continuously since then. Only 11.0% were part-time students at any time in their educational careers, fewer interrupted their education by stopping out for a year or more. However, 10.0% had some CAAT experience as well as attending university, and 13.0% had entered university early in 1973. Most of the university graduates (second group in the table) started university in 1974, with 2 in 10 continuing for three years, half for four years, and another 2 in 10 for six years. Only 14.6% were ever part-time students, only 4.8% stopped out, and 7.0% were early beginners, entering university in 1973.

In contrast to these two rather conventional groups, individuals who attended university but who did not graduate are markedly different. While half entered university in 1974, 3 in 10 entered in 1975 or later; 17.6% interrupted their university by stopping out for a year or more; almost one-quarter attended part-time at some time in their educational careers. Three in 10 completed two years of university, and another 5 in 10 completed more, indicating that many individuals in this group came close to finishing degrees.

Individuals with CAAT certificates or diplomas mainly show a conventional pattern of education. Four in 10 began attending a CAAT in 1973 with a Grade 12 education, and another 4 in 10 began in 1974 (we estimate that about 60% of this latter group had gone on to Grade 13). Only 7.1% interrupted their community college years by stopping out and only 14.2% went part-time at some time during their CAAT careers. Half of the CAAT students attended for two years, an additional quarter for three years, and only 16.9% attended for one year. CAAT students who obtained no CAAT certificate or diploma (almost 5 in 10), like CAAT graduates, frequently started in 1973, were in 13.0% of the cases part-time students, and infrequently interrupted their post-secondary education by stopping out. The last characteristic is typical of this group because 7 in 10 stayed at a CAAT for a year.

Two groups are rather small in the sample--those with university degrees and some CAAT experience, and those with both university degrees and CAAT diplomas or certificates. Students in these groups had between four and five years of education and began mainly in 1974. A majority of the first group proceeded first to university, then to a CAAT, but for the second group the majority began at CAAT. In the first group, significant proportions were early starters (beginning post-secondary education in 1973), part-time students, and stop-outs.

CAAT diploma/certificate students with some university experience generally started university first, began post-secondary education in 1974 (though almost one-third began in 1973), and attended for three to four years. Almost 4 in 10 were part-time students at some time in their educational careers, and 4 in 10 interrupted their educational careers at least once by stopping out.

Finally, individuals with both university and CAAT experience, but with no degrees, certificates, or diplomas, form a group showing high levels of part-time study (almost 4 in 10) and of stopping out (25.0%), with most completing two to three years of post-secondary education. While most people in this group began post-secondary education in 1973 or 1974, one-quarter began after 1974, thus coming late to the university or CAAT experience.

What Are the Phase IV Respondents Doing Now?

Our questionnaire began with the general query: "What do you do most of the time?" Six alternatives were listed and respondents were asked to circle as many response alternatives as applied. From this item we can obtain a general picture of the present social statuses of our respondents, shown in Table 1.6. (This item was also cross-checked with item C.1 of the questionnarie to confirm labor force status.)

The vast majority of our sample is currently in the labor force. Only 2 in 10 women are not; half of these are housewives, the remainder are students. Of the 9.1% of men not in the labor force, almost all are students. Married men (95.9%) tend to be more frequently in the labor force than married women (73.9%). Of single men, 87.7% are in the labor force, compared to 88.1% of single women. The vast majority of men and women in the labor force work full-time, only about 1 in 10 being part-time workers. Unemployment rates are low--3.7% for men and 5.5% for women. There is a somewhat higher rate of unemployment for university graduates, but this is the group that has entered the job market most recently. A further breakdown of unemployment rates by educational achievement group is not practical, given the small frequencies that result.

On item A.1, 20.0% of our respondents reported that they are currently students. This result tallies very closely with the 20.4% who indicated that they were enrolled in the academic year of 1978-79 (item B.1),--14.7% in university and 5.7% at a CAAT. Men (8 in 10) are somewhat more likely to be full-time students than women (7 in 10), but 7 in 10 women combine education with work, compared with 6 in 10 men. The most popular fields of study for men presently enrolled in university are commerce, engineering, law, biological sciences, economics, and geography. For women, the most popular fields include education, psychology, commerce, biological sciences, sociology, and law. For presently enrolled CAAT students, the most popular programs for men include business management and commerce, and electronics and electrical technologies; and, for women, include secretarial arts and science, community services, business management and commerce, and fine, applied, and performing arts.

Entrance into the Labor Market and Current Jobs

In our survey we obtained a great deal of information about two kinds of jobs--first full-time, and current full-time. Current job is a straightforward concept, but first full-time job involves some interpretation. We did not explicitly exclude summer employment while in high school, but respondents clearly excluded this kind of work, when giving us responses. In the job history table (item C.22 of the questionnaire), the earliest job was listed by a single respondent indicating a full-time job in 1971; 19 indicated a first full-time job in 1972; and 340 respondents listed 1973 as a starting date. Thus, first full-time job is largely post-high-school employment.

Knowledge of the first full-time job enables one to examine the relationship between educational attainment and entrance into the labor market, while knowledge of current job tells one something about how careers are progressing. Because only five years have elapsed since completion of Grade 13, in general we have career information only on individuals with no post-secondary education, or with a CAAT experience. Most university graduates have only recently entered the labor market.

Table 1.7 shows the relationship of educational attainment to the years respondents began first and current jobs and documents the late labor-market entry of the university graduates. In contrast, it is clear that the vast majority of individuals with no post-secondary education took their first full-time jobs by 1974, and their current jobs in various years, spread fairly evenly over the seven-year period shown in Part B of the table. CAAT and university students who did not graduate mainly obtained their first full-time jobs by 1975, with current job starts concentrated in the period 1977-1979. The CAAT graduates largely found first jobs in the period 1974-1976 and current jobs during the years 1976-1978. There is a tendency for women to enter the labor market earlier than men, especially with respect to beginning the first full-time job.

The number of full-time jobs our respondents have had is a function of years in the labor force, with individuals having no post-secondary education showing a greater number of full-time jobs than other groups. Still, from 60%-70% of our respondents reported only one or two full-time jobs. The high proportion of men and women who are university graduates and who have not worked reflects the fact that the majority of this group is still enrolled in university, graduate, or professional schools.

Geographical Mobility

Finding 1,522 members of the original sample enabled us to study the geographical mobility patterns of this group. We were able to compare the original residence, as determined by the high school of attendance in 1972-73, with the present residence location. Table 1.8 portrays the patterns of movement by stratum, or region.

Over 300 places in Ontario were coded as present residences of our respondents in Phase IV. We also coded whether respondents living in the Maritime Provinces, Quebec, the Prairie Provinces, British Columbia, the Northwest Territories, the United States, or in another country. The most difficult problem, however, was to determine whether respondents were "stayers" or "movers." For Stratum 1 (labeled "big city"), which originally contained all the high schools in Metro Toronto, we counted as "stayers" all persons still living in Metro

63

Toronto at the time of Phase IV, or living in surrounding suburbs such as Ajax, Bramalea, Maple, Mississauga, Richmond Hill, Streetsville, and Whitby. (These latter suburbs were not originally in Stratum 1). However, persons living in Aurora, Brampton, Beeton, Newmarket, Oshawa, or Tottenham, or in other places away from Metro Toronto, were defined as movers. Similar decisions regarding movers and stayers were made for Stratum 2 ("larger cities"), which originally contained high schools in such places as Sudbury, Windsor, London, Kitchener, Hamilton, and Ottawa; and for Stratum 3 ("smaller cities"), which originally included high schools in such places as Sault Ste. Marie, North Bay, the Niagara region, and the suburban areas around Metro Toronto such as Burlington, Oakville, Mississauga, Richmond Hill, and Pickering. Finally, for Stratum 4 ("towns and rural areas"), which originally included high schools in such places as Blind River, West Lorne, Owen Sound, Sydenham, Picton, and elsewhere, we defined stayers as living in towns up to 30 miles from the original high school location. We did this because these high schools usually drew students from surrounding areas and, with good roads, a collection of nearby small towns today is an analogue to the suburbs around a metropolitan area. Thus, students who originally attended Iroquois Falls Secondary School were defined as stayers if they now reside in Matheson, Ramore, South Porcupine, or Timmins. Similarly, students who attended Plantagenet Secondary School were defined as stayers if they now live in Alfred, Clarence Creek, Curran, Lefaivre, Rockland, Wendover, or St. Isodore de Prescott.

As Table 1.8 shows, three-quarters of the individuals in our sample are not geographically mobile; that is, they have not moved a great distance from their original place of high school attendance. Movers increase as one goes from "big city" to "towns and rural areas," with women being slightly more frequent movers than men. What is striking is the contrast in moving patterns between men and women in Stratum 4. While 71.6% of men in the rural areas have remained, only 56.2% of the women have done so. This finding of basic geographical immobility for both men and women, with the exception of "towns and rural area" women (who frequently move away from where they were raised), will help us understand data on occupational achievement, presented in Chapter Six.

It should be noted that only 3.7% of our Phase IV respondents have moved out of province. The prairie provinces are the most frequent out-of-province location, followed by British Columbia, Quebec, and the Maritimes; only 0.6% of our sample have moved to the United States.

FOOTNOTES

1. The modest study of an Ontario town by Oswald Hall and Bruce MacFarlane in 1961 is an exception; it is entitled *Transition from School to Work* (Ottawa: The Queen's Printer, 1965, Cat. No. L2-23/10). In *Educational Systems and the Labour Market* (Toronto: Longman, 1974). Edward Harvey states: "Strictly speaking, there are no Canadian studies that qualify as longitudinal analyses of linkages between educational system and the labour market" (p. 70); his own research reported in this volume is referred to as "historical cohort anlysis". As of this writing, the authors are aware of a follow-up of Ontario high school students first surveyed by Marion Porter, John Porter and Bernard R. Blishen, the findings of the original study being reported in *Does Money Matter? Prospects for Higher Education in Ontario* (Toronto: Macmillan Company of Canada, 1979); this follow-up study is still in manuscript form. A longitudinal survey of youth is also being conducted currently in Quebec at Laval University under the title "L'enquête sur les Aspirations Scolaires et les Orientations Professionnelles des Etudiants," directed by Pierre W. Bélanger and Guy Rocher. The longitudinal study of youth in the Riverdale district of Toronto by Stewart Crysdale, "Aspirations and Expectations of High School Youth: An Action-Research Project in a Workers' Area," *International Journal of Comparative Sociology*, Vol. XVI, Nos. 1-2 (January, 1975), pp. 19-36. Prof. Crysdale has recently submitted a report on his follow-up study of Riverdale respondents to the Ontario Ministry of Education.

2. As reported in P. Anisef, *The Critical Juncture: Realization of the Educational and Career Intentions of Grade 12 Students in Ontario*. Toronto: Ontario Ministry of Colleges and Universities, 1975, p. 18.

3. As reported in P. Anisef, *The Critical Juncture: Preliminary Survey*. Toronto: Ontario Ministry of Colleges and Universities, 1973, p. 16.

TABLE 1.1: MARITAL STATUS BY SEX, 1979

Marital Status	Men (%)	Sex Women (%)	Total (%)
Single	53.8	40.3	46.8
Engaged	8.2	6.5	7.3
Living with partner	4.3	4.3	4.3
Married	3.0	46.0	39.8
Separated	0.6	2.1	1.3
Divorced	0.1	0.7	0.4
Widowed	0.0	0.1	0.1
TOTAL (N)	722	790	1,512
Significance (p)			

TABLE 1.2: EDUCATIONAL ACHIEVEMENT BY SEX, 1979

Level of Education	Sex Men (%)	Women (%)	Total (%)
Presently enrolled in graduate or professional school	7.3	5.7	6.4
Graduated university	21.4	19.5	20.4
Attended university but did not graduate	7.4	4.7	6.0
Graduated from CAAT	12.5	20.1	16.5
Attended CAAT but did not graduate	6.9	5.1	6.0
University graduate and some CAAT experience	1.7	1.1	1.4
University graduate and graduated from CAAT	0.9	2.9	2.0
Graduated CAAT and some university experience	2.3	2.7	2.5
Some university and some CAAT experience	2.8	2.6	2.7
No post-secondary experience	36.8	35.6	36.2
TOTAL (N)	727	795	1,522
Significance (p)			

TABLE 1.3: ALTERNATIVE FORMS OF PUBLIC EDUCATION AND LEVELS OF EDUCATIONAL ATTAINMENT BY SEX

Percentage of Participation by Level of Educational Achievement, 1979

Alternate Forms of Public Education	University Degree[a]			CAAT Diploma/ Certificate[b]			Some University and/or Some CAAT			No Post-Secondary			Total All Groups		
	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)
Private vocational schools	1.4	2.5	2.0	3.2	2.2	2.6	5.0	2.7	4.0	3.3	4.3	3.8	3.0	3.1	3.1
Adult training	2.0	5.9	4.0	14.0	13.0	13.4	5.7	7.6	6.5	14.4	8.8	11.5	9.0	8.7	8.9
Apprenticeship	2.8	2.1	2.5	14.9	1.5	6.5	9.7	0.0	5.4	22.7	1.4	11.7	13.1	1.5	7.0
Short courses	18.9	28.7	23.9	34.3	38.8	37.1	31.1	42.1	35.9	26.8	43.7	35.5	26.2	38.0	32.4
TOTAL (N)	227	232	459	108	181	289	125	99	224	267	283	550	727	795	1,522

Note: Each row of the table represents a response to a different question and thus, column percentages should not be totalled. The table should be read as follows: for example, of all men with university degrees (N = 227), 18.9% have taken a short course since leaving high school. Based on item A.9a in the questionnaire.

[a] - Includes all persons in graduate or professional schools, all persons with a university degree and a CAAT diploma/certificate, and all persons with a university degree and some CAAT experience.

[b] - Includes all persons with a CAAT diploma/certificate and some university experience.

TABLE 1.4: EXTENDED CROSSOVER TABLE RELATING EDUCATIONAL AND VOCATIONAL EXPECTATIONS IN THE SPRING OF 1973 TO EDUCATIONAL AND VOCATIONAL ACTIVITY IN THE FALL OF 1974 AND EDUCATIONAL ACHIEVEMENTS IN 1979

Expectations Spring 1973	Work Full-Time			Attend University			Attend CAAT			Part-Time Study			Alternative Activities			Totals, Percentage, 1973 Expectations		
		Men	Women		Men	Women		Men	Women		Men	Women		Men	Women		Men	Women
Work full-time	GU	0	0	GU	1	0	GU	0	0	GU	0	0	GU	0	0	GU	0.9	0.0
	SU	1	1	SU	1	0	SU	0	0	SU	0	0	SU	0	0	SU	1.8	0.8
	GC	3	7	GC	0	0	GC	2	0	GC	0	0	GC	0	3	GC	4.5	7.7
	SC	3	4	SC	0	0	SC	1	0	SC	0	0	SC	1	1	SC	4.5	3.8
	HS	86	96	HS	0	1	HS	2	2	HS	2	2	HS	7	13	HS	88.2	87.7
N		(201)			(3)			(7)			(4)			(25)			(110)	(130)
%		16.96%, Cell 1			0.25%,Cell 2			0.59%,Cell 3			0.34%,Cell 4			2.11%,Cell 5				
Attend university	GU	4	5	GU	147	141	GU	1	3	GU	0	1	GU	2	6	GU	64.7	67.8
	SU	3	3	SU	23	26	SU	0	1	SU	2	0	SU	2	0	SU	12.6	13.0
	GC	1	2	GU	9	3	GC	8	16	GC	0	0	GC	4	4	GC	9.2	10.9
	SC	2	1	SC	0	0	SC	4	1	SC	0	0	SC	1	2	SC	2.9	1.7
	HS	19	11	HS	0	1	HS	1	0	HS	2	0	HS	3	3	HS	10.5	6.5
N		(51)			(350)			(35)			(5)			(27)			(238)	(230)
%		4.30%, Cell 6			29.4%,Cell 7			2.95%,Cell 8			0.42%,Cell 9			2.26%,Cell 10				
Attend CAAT	GU	1	0	GU	5	19	GU	5	3	GU	0	0	GU	1	3	GU	13.2	13.7
	SU	3	2	SU	5	5	SU	0	5	SU	0	0	SU	3	[illegible]	SU	12.1	7.1
	GC	2	12	GC	0	1	GC	28	60	GC	1	2	GC	4	14	[illegible]	38.5	48.9
	SC	7	4	SC	0	0	SC	7	7	SC	0	3	SC	3	4	SC	18.7	9.9
	HS	13	29	HS	0	0	HS	0	3	HS	1	0	HS	2	5	HS	17.6	20.3
N		(73)			(35)			(118)			(7)			(40)			(91)	(182)
%		6.16%, Cell 11			2.95%Cell 12			9.96%Cell 13			0.59%Cell 14			3.8% Cell 15				
Part-time study	GU	1	1	GU	8	2	GU	0	0	GU	0	0	GU	1	1	GU	37.0	16.7
	SU	1	1	SU	0	0	SU	0	0	SU	0	0	SU	0	0	SU	3.7	4.2
	GC	2	1	GC	0	1	GC	1	1	GC	0	0	GC	0	0	GC	11.1	12.5
	SC	2	1	SC	0	0	SC	1	0	SC	0	0	SC	0	0	SC	11.1	4.2
	HS	9	10	HS	0	0	HS	0	0	HS	0	1	HS	1	4	HS	37.0	62.5
N		(29)			(11)			(3)			(1)			(7)			(27)	(24)
%		2.45%, Cell 16			0.93%Cell 17			0.25%Cell 18			0.08%Cell 19			0.59%Cell 20				
Alternative activities	GU	5	1	GU	13	11	GU	1	1	GU	0	1	GU	0	2	GU	19.8	28.1
	SU	2	2	SU	6	3	SU	0	0	SU	0	0	SU	0	0	SU	8.3	8.8
	GC	7	5	GC	2	1	GC	4	6	GC	1	[illegible]	GC	1	0	GC	15.6	21.1
	SC	2	0	SC	0	0	SC	2	0	SC	0	0	SC	0	0	SC	4.2	0.0
	HS	43	17	HS	0	0	HS	0	0	HS	1	0	HS	6	7	HS	52.1	42.1
N		(84)			(36)			(14)			(3)			(16)			(96)	(57)
%		7.09%, Cell 21			3.04%Cell 22			1.18%Cell 23			0.25%Cell 24			1.35%Cell 25				
Totals, percentages, fall 1974 activity	GU	5.0	3.2	GU	79.1	80.5	GU	10.3	6.4	GU	0.0	20.0	GU	9.5	16.4	GU	34.9	32.3
	SU	4.5	4.2	SU	15.9	15.8	SU	0.0	5.5	SU	20.0	0.0	SU	11.9	1.4	SU	9.3	8.0
	GC	6.8	12.5	GC	5.0	2.8	GC	63.2	76.1	GC	20.0	20.0	GC	21.4	28.8	GC	14.2	22.3
	SC	7.2	4.6	SC	0.0	0.0	SC	22.1	7.3	SC	0.0	30.0	SC	11.9	9.6	SC	6.4	4.8
	HS	76.6	75.5	HS	0.0	0.0	HS	4.4	4.6	HS	60.0	30.0	HS	45.2	43.8	HS	35.2	32.6
N		(222)	(216)		(220)	(215)		(68)	(109)		(10)	(10)		(42)	(73)		(562)	(623)
GRAND TOTAL																		(1185)

Note: The cells numbered 1 to 25 show the educational attainment of our Phase IV respondents to 1979. The symbol (GU) refers to graduate university, (SU) some university, (GC) graduate CAAT, (SC) some CAAT, and (HS) to high school only, and these terms are more fully defined in the text accompanying this table.

TABLE 1.5: THE TIMING OF POST-SECONDARY EDUCATION: YEARS OF EDUCATION, YEAR OF START, PART-TIME STATUS, STOPPING OUT, AND ORDER OF INSTITUTIONS BY LEVEL OF EDUCATIONAL ACHIEVEMENT, 1979

	Length of Education in Years							Year of Start											
Level of Educational Achievement 1979	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	NK[a] (%)	1973 (%)	1974 (%)	1975 (%)	1976 (%)	1977 (%)	1978 (%)	NK[a] (%)	Ever Part-Time Student (%)	Ever Stopped Out (%)	Started CAAT Before Univ. (%)	Univ. Before CAAT (%)	Total (N)
Graduate professional school	-	-	3.0	17.0	69.0	11.0	-	13.0	83.0	3.0	1.0	-	-	-	11.0	8.0			100[b]
University degree	-	2.2	19.4	53.8	22.9	0.6	1.0	7.0	83.1	8.6	1.0	-	-	0.3	14.6	4.8			[illegible]14
Univerisity no degree	22.0	29.7	16.5	23.1	8.8	-	-	9.9	56.0	19.8	4.4	5.5	4.4	-	26.2	17.6			91
CAAT diploma/ certificate	16.9	51.2	23.2	5.1	1.6	1.2	0.8	39.0	42.1	11.8	3.1	1.6	1.6	0.8	14.2	7.1			254
CAAT no diploma/ certificate	69.6	19.6	5.4	2.2	1.1	0.0	2.2	46.7	21.7	13.0	4.3	5.4	6.5	2.2	13.0	4.3			92
University degree and some CAAT	-	-	4.5	36.4	45.5	13.6	0.0	36.4	63.6	-	-	-	-	-	31.8	27.3	18.2	63.6[c]	22
University degree and CAAT diploma/ certificate	-	6.4	6.4	35.5	32.3	19.4	0.0	29.0	61.3	9.7	-	-	-	[illegible]	[illegible]	9.7	51.6	41.9[d]	31
CAAT diploma/ certificate and some university	2.5	22.5	30.0	30.0	12.5	-	2.5	27.5	62.5	5.0	2.5	-	-	2.5	37.5	42.5	40.0	57.5[e]	40
Some univerisity and some CAAT	2.5	32.5	20.0	20.0	22.5	2.5	0.0	32.5	42.5	12.5	5.0	7.5	-	-	37.5	25.0	22.5	77.5	40

[a] NK - Not known.

[b] - Include 10.0% with CAAT experience also.

[c] - In 18.2% of the cases, the order of CAAT and university experience is not known.

[d] - In 6.4% of the cases, the order of CAAT and university experience is not known.

[e] - In 2.5% of the cases, the order of CAAT and university experience is not known.

TABLE 1.6: LABOR FORCE STATUS AND STUDENT STATUS OF PHASE IV RESPONDENTS BY SEX AND MARITAL STATUS[a], SPRING 1979.

A. LABOR FORCE STATUS

	Sex			
	Males		Females	
Status	(%)	(%)	(%)	(%)
In the Labor Force		90.7		81.0
Employed full-time[b]		79.1		64.6
Single[c]	45.5		35.0	
Married[d]	32.9		29.0	
NK[e]	0.7		0.6	
Employed part-time		7.9		10.9
Single	6.4		5.8	
Married	1.5		5.1	
Unemployed		3.7		5.5
Single	2.6		2.8	
Married	1.1		2.8	
Not in the Labor Force		9.1		19.0
Housewife	0.0	0.0	11.2	11.2
Full or part-time student[f]		8.2		7.2
Single	6.8		5.4	
Married	1.4		1.8	
Other (e.g. ill, travelling)		0.9		0.6
Single	0.8		0.5	
Married	0.1		0.1	
TOTAL		729		797
Significance (p)				

TABLE 1.6 (cont'd)

B. STUDENT STATUS

	Sex			
	Males		Females	
Status	(%)	(%)	(%)	(%)
Full-time student		38.1		31.3
Single	31.6		23.3	
Married	6.5		8.0	
Part-time student		0.6		2.0
Single	0.6		0.7	
Married	0.0		1.3	
Full-time student and employed[g]		46.4		34.7
Single	40.6		28.7	
Married	5.8		5.3	
NK[e]	0.0		0.7	
Part-time student and employed[g]		13.5		26.7
Single	10.3		20.0	
Married	3.2		6.7	
Part-time student and unemployed		1.3		5.4
Single	1.3		4.7	
Married	0.0		0.7	
TOTAL (N)		155		150
Significance (p)				

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[a] - Based on responses to questionnaire items A.1 and C.1 and D.7; C.1 was considered the better indicator of employment status.

[b] - Also includes those persons employed full-time and part-time.

[c] - Single includes engaged, separated, divorced and widowed.

[d] - Married includes living with companion or partner.

[e] - Marital status not known.

[f] - Includes only students not working.

[g] - Employed includes both full-time and part-time employment.

TABLE 1.7: STARTING YEAR OF FIRST AND CURRENT FULL-TIME JOBS, AND TOTAL NUMBER OF FULL-TIME JOBS BY LEVEL OF EDUCATIONAL ATTAINMENT

Level of Educational Attainment by Sex

Year or Number	Univ. degree[a] Men (%)	Univ. degree[a] Women (%)	CAAT degree[b] Men (%)	CAAT degree[b] Women (%)	Some Univ. &/or CAAT Men (%)	Some Univ. &/or CAAT Women (%)	No Post-Secondary Education Men (%)	No Post-Secondary Education Women (%)
Year Started First Full-Time Job								
1971	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
1972	0.0	1.4	1.9	0.9	1.1	0.0	3.2	1.4
1973	2.0	1.6	8.7	7.5	17.2	12.0	51.8	56.8
1974	4.3	5.5	15.4	17.3	18.9	25.3	28.1	27.2
1975	3.0	2.7	21.6	23.4	20.1	25.1	6.0	8.3
1976	7.2	3.3	22.9	28.2	16.1	17.5	5.0	2.9
1977	9.7	29.7	16.3	12.7	16.9	7.9	2.3	1.2
1978	49.8	42.7	10.6	5.9	5.5	6.3	2.1	1.6
1979	24.0	13.2	2.6	3.5	4.3	5.9	1.5	0.6
TOTAL (N)	160	161	98	171	113	88	256	264
Significance								
Year Started Current Full-Time Job								
1972	0.0	0.0	0.0	0.0	0.0	0.0	0.8	1.0
1973	0.0	0.0	1.8	0.7	2.6	3.3	18.7	17.4
1974	0.0	0.0	3.5	5.7	4.7	5.8	17.6	18.5
1975	0.5	1.4	10.2	10.3	5.5	9.3	10.3	6.2
1976	0.6	2.7	22.4	24.0	9.7	15.8	12.7	14.7
1977	8.1	17.6	25.3	23.9	26.8	24.6	12.0	13.4
1978	47.2	53.4	22.5	23.7	29.2	26.1	15.1	19.5
1979	43.6	24.8	14.3	11.8	21.5	15.2	12.9	9.1
TOTAL (N)	135	131	95	140	93	63	248	183
Significance (p)								
Number of Full-Time Jobs[c]								
None[d]	31.2	32.2	4.8	4.7	8.7	10.3	1.4	4.5
One	44.7	47.0	38.0	40.2	31.0	32.5	32.2	31.3
Two	17.0	13.2	32.0	33.1	24.9	33.2	28.0	30.9
Three	3.7	5.4	14.4	16.5	17.8	16.7	17.3	16.2
Four	3.0	1.5	8.1	3.6	8.8	5.9	13.1	11.8
Five	0.4	0.6	2.7	1.9	8.9	1.5	5.3	4.8
Six	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
Seven	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.7
TOTAL (N)	227	232	108	181	125	99	267	283
Significance (p)								

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[a] - Also includes persons in graduate or professional schools, persons with a university degree and a CAAT diploma/certificate and persons with a university degree and some CAAT.

[b] - Also includes persons with a CAAT diploma/certificate and some university experience.

[c] - Number of full-time jobs held since first full-time job, including first full-time job.

[d] - Never worked.

TABLE 1.8: GEOGRAPHICAL MOBILITY FROM PLACE OF RESIDENCE WHILE ATTENDING HIGH SCHOOL TO PRESENT RESIDENCE LOCATION

Geographical Mobility Status	Stratum											
	Big City			Larger Cities			Smaller Cities			Towns and Rural Areas		
	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)	Men (%)	Women (%)	Total (%)
Stayers	86.5	84.2	86.8	76.8	74.0	75.4	75.3	75.3	74.8	71.6	56.2	63.0
Movers	13.5	15.8	14.1	23.2	25.4	24.6	24.7	24.7	24.6	28.0	42.6	36.6
Moved elsewhere in Canada outside Ontario[a]	2.7	2.6	2.6	6.5	5.5	5.9	3.3	3.6	3.5	3.5	2.8	3.2
TOTAL (N)	148	190	340	155	181	338	150	166	317	257	249	500

[a] - These subcategories of movers are included in the main category of movers above.

CHAPTER TWO

METHODOLOGICAL CONSIDERATIONS IN THE SURVEY*

In this chapter, we shall explain some of the methodological considerations underlying the quantitative analysis in this report. Appendix A contains detailed description of the survey procedures. Our primary objective will be to examine the extent to which our follow-up sample of Phase IV respondents allows us to generalize the target population of Grade 12 students in 1973.[1] The chapter consists of several subsections. We first compare persons who responded to the Phase IV follow-up with those who did not, using Phase I as the basis of reference. Secondly, we compare persons who responded to the Phase IV mailed questionnaire with those who did not, but were subsequently contacted by telephone. This comparison is important because several questions were omitted or slightly altered for the telephone respondents. We then examine the representativeness of our sample, once statistical procedures have been applied that serve to correct, at least partly, for nonresponse. Finally, we present a consideration of the weighting procedures used in this report. The reader primarily interested in how well our sample allows us to generalize to the target population should refer to the section on representativeness (p. 47).

A COMPARISON OF PHASE IV RESPONDENTS AND NONRESPONDENTS

A total of 1,522 persons completed Phase IV of our research program, comprising 60% of the Phase I (original questionnaire) sample.

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*This chapter was prepared by Norman R. Okihiro.

One question constantly raised in survey research concerns the extent to which nonrespondents differ from respondents. One consideration is that nonrespondents were more isolated or more geographically mobile, since the correct addresses of over half of the nonrespondents could not be retrieved. Another possibility is that nonrespondents who did receive questionnaires chose not to participate. The panel design of our survey allows us to examine this question through a direct comparison of Phase IV respondents and nonrespondents, with reference to their responses to Phase I questions.

Table 2.1 compares the distribution along selected sociodemographic variables of our 1,522 (unweighted) respondents to the 1,033 persons who did not respond to Phase IV, but were included in the original survey. The two groups do not differ significantly on the variables of sex or religion. Researchers using similar designs have tended to find higher completion rates among persons of higher social-class background. Only a marginally important difference is revealed with regard to SES, when Phase IV respondents and nonrespondents are compared.

Phase IV respondents tended to denote their ethnic identity as "Canadian" more often than nonrespondents, but the difference, though statistically significant (owing to the large number of cases), is just 4%. Substantively as well as statistically significant differences were found, however, when strata and high school grades were examined. Proportionally more respondents than nonrespondents were from rural areas (Stratum 4) and proportionally fewer from the Metropolitan Toronto area. One can speculate that it is easier to locate individuals in rural communities than in larger, more impersonal centers like Toronto.

78

Perhaps the most important and interesting difference in Table 2.1 is that 44% of the respondents had self-reported high school grades of B or higher, almost 10% more than nonrespondents. Several other educationally relevant differences are found in Table 2.2.

Table 2.2 is similar to Table 2.1, except that Phase IV respondents and nonrespondents are compared on variables that have been measured on interval-level scales, and the T-test statistic was used to examine differences in the mean scores of the two groups. The crucial column is the two-tail probability associated with the mean difference. The average score for Phase IV respondents is not significantly different from that for nonrespondents along family educational encouragement (FAMENC1), non-family educational encouragement (NFMENC1), or level of occupational expectation (VAR097) in 1973, expressed as a Blishen score.

Important differences emerge, however, in terms of educational plans for fall of 1974 (LEE) and self-concept of ability relative to classmates (FSCA1), which tended to be higher for respondents than nonrespondents. We saw in Table 1.1 that respondents tended to have higher marks in high school than nonrespondents. Their educational plans were also more oriented towards higher levels of education, and their academic self-image, relative to their classmates, tended to be higher than nonrespondents. Their concept of ability to do post-secondary work, in contrast to nonrespondents, was statistically insignificant. Similarly, respondents had marginally higher job aspirations, but their reality-grounded job expectations were no different from nonrespondents.

Respondents tend to be disproportionately drawn from among those whose high school academic experiences were positive, in the objective sense of marks and in the social-psychological sense of positive self-concepts of ability with respect to peers. This seems to result in more ambitious post-secondary plans. However, the social-psychological differences do not extend to confidence in the ability to do post-secondary work or to the anticipated level of job prestige.

A COMPARISON OF PHASE IV RESPONDENTS BY MODE OF RESPONSE

Collection of data for Phase IV involved the use of mailed questionnaires and telephone interviews for those who did not respond to the mailed instrument. This resulted in 1,068 mailed completions and 454 telephone completions, comprising the 1,522 total respondents. (Complete details of the results of address-tracing procedures by school region and strata are given in Appendix A, subsections G, H, and I.) In this section, we examine differences between the two groups on many different variables. These differences are important because, owing to budgetary and methodological constraints (e.g., respondent fatigue on the telephone) a number of questions were omitted from the telephone interviews; in some cases, the range of closed-end responses to a given question was smaller. Care should be taken in generalizing results of the Phase IV sample to the target population, when mailed questionnaire respondents were the sole source of information. In this regard, the research team carefully screened the phone interview schedule, with a view to retaining the most important items identical in form to those of the mailed questionnaire. Questions omitted from telephone interviews included: A.3, A.4, B.12, B.13, B.16, B.17, B.21, C.9 through C.12, D.4, D.5, and D.6. Questions with restricted response ranges in telephone interviews included: A.6, B.18, C.7, and D.1.

Table 2.3 compares mail and phone respondents in Phase IV along selected sociodemographic, and occupation- and education-related variables. Though no differences were found in the distribution of each group with respect to SES, strata, ethnic self-identification, or marital status, some differences were found on sex, religion, and high school grades. Those who responded to the back-up telephone interviews were proportionally more likely to be male, Roman Catholic, and to have had lower grades in high school than respondents who sent back mailed questionnaires. In terms of educational and occupational achievement variables, the differences between telephone and mail respondents are even more striking. The telephone mode seems to pick up respondents who are more likely to be employed full-time and less likely to be students or to have successfully completed a university or CAATS program. For those currently working, telephone respondents tend to have lower job prestige, but essentially the same pay range, as mail respondents; however, a large proportion of telephone respondents feel that their job is highly challenging.

Table 2.4 continues the comparison of mail versus phone respondents with regard to interval-level variables using T-tests. The group means associated with the variables of encouragement for further education from family and nonfamily sources are not significantly different. Neither are they different for the type of activity the current job requires. However, telephone respondents tended to have depressed educational plans and lower levels of academic self-concept, both in terms of ability to do post-secondary school work and relation to peers.

Their occupational aspirations and expectations were marginally lower, on the average, than the mail respondents.

The pattern that emerges from our data analysis supports the use of telephone interviews as a good follow-up procedure. The use of mailed questionnaires alone would have resulted in a smaller sample, one which would have been much more biased than our actual sample. The inclusion of the educationally and, perhaps occupationally, disadvantaged group of telephone respondents greatly increases the likelihood that patterns described in this report accurately reflect what is going on in the target population.

RESTRICTED RESPONSE RANGES FOR TELEPHONE INTERVIEWS

Questions A.6, B.18, C.7, and D.1 are closed-ended questions which were constructed with fewer response options for telephone respondents. In particular, 3-point scales were used in the telephone schedule, but 5-point scales for the mailed interviews. For example, the range of responses for question A.6 was:

Category Code	Mail	Telephone
1	Very useful	Very useful
2	Frequently useful	
3	Occasionally useful	Occasionally useful
4	Rarely useful	
5	Never useful	Never useful

To minimize the difference in questionnaire design without severe loss of data, three ways of reorganizing the data were examined. One method involved recoding mailed responses so that "frequently useful" and "rarely useful" were recoded as "very useful" and "never useful," respectively. A second approach involved recoding the mailed responses so that "frequently," "occasionally," and "rarely" were recoded as "occasionally useful." Examination of the response distribution along each recode by mode of response resulted in more similarity when moderate responses were recoded as extremes. A third possible solution was to leave the recoding untouched. This would result in telephone responses of "frequently" or "rarely" being considered extremes ("very" or "never," respectively). This solution was preferable, since the number of telephone respondents was smaller than the number of mail respondents we would have to recode in solutions one and two. Thus, the third solution was implemented.

REPRESENTATIVENESS OF THE SAMPLE

From the original group of 2,555, a total of 1,522 (about 60%) responded to Phase IV. How representative of our target population of 1973 Grade 12 students are these 1,522 persons? Perhaps a better way of posing the problem is: can the 1,522 respondents be used to provide accurate estimates of population parameters? This is important, because in practice we do not use the 1,522 respondents as a simple random sample. Instead, we follow the complicated procedure (described in detail in Appendix A) whereby each person is assigned a number or weight which varies from PSU (Primary Sampling Unit) to PSU (roughly, school to school). Thus, instead of each person in the sample representing a constant number of people in the population, as in simple random sampling, each respondent in Phase IV was assigned a weight which took into account (weightable) nonresponse in his particular PSU. For example, had the rate of response to Phase IV in PSU A been one-half, and had every person in PSU B responded, each respondent in PSU A would have been assigned a weight twice that of B.

Using this procedure, we can arrive at estimates of the population parameters which have the advantage of correcting for differences in response rates by PSU. For example, if PSUs in lower SES areas tend to have lower follow-up completion rates, one can correct for this by assigning larger weights to those who did respond in these PSUs (i.e., each individual represents more people in the population, making up for his missing classmates). Unfortunately, while this procedure corrects for PSU differentials, it assumes that respondents within a PSU are similar to their classmates who do not respond. The population parameters presented in this section are derived from the corrections described above, with the attendant advantages and disadvantages.

Six variables were employed in checking sample representativeness. Three were considered germane to the general objectives of the study: the respondent's sex, his or her family income in 1973, and the occupational prestige of his or her father.[2] The other three were selected because significant differences in unweighted (uncorrected) scores were found between those who completed Phase IV and those who did not. Thus, the variables indicate the effectiveness of the correction scheme. Using procedures for estimating population proportions and the formulae for estimating the appropriate variances, we arrived at population estimates and their associated confidence intervals. In this regard, the half sample weights were employed, and a special computer program was constructed to carry out the calculations. Figures for Phase I and Phase IV are presented.

In examining Table 2.5, it is important to keep in mind that the formulae used here are based on rough but unbiased estimates of variances of each proportion. These estimates were derived by dividing the sample into two roughly equal subsamples in each stratum. Perhaps the best way to interpret such figures is to compare the given proportions in each phase for similarities or marked differences.

One systematic way of accomplishing this is to see whether the Phase IV proportion falls within the .95 confidence interval estimated for the Phase I sample. Four of 26 Phase IV proportions are outside these limits: the proportion of males; the proportion of females; the percentage with university plans in 1974; and the percentage who did not know their educational plans in 1974. In all cases, however, the Phase IV percentages were within .5% of the relevant upper or lower confidence limit. The high school grade proportions and the proportion of those with lowest self-concept of ability with respect to peers approach the .95 confidence limits.

Given the methods of calculating the confidence limits and analyzing the results, one conclusion is that our corrected sample slightly overrepresents females and university aspirants, and underrepresents males and persons who did not know their educational plans in 1974. In general, there is a slight tendency to overrepresent those who have had positive academic experiences.

WEIGHTING PROCEDURES USED IN THIS REPORT

In previous reports, the weighting procedure used gave estimates of the number of Grade 12 students that could be expected in each category. The total estimated N was approximately 100,000. This procedure removes the step of changing from sample proportions to approximate population numbers. However, when a statistical analysis of trends is important, the procedure yields Ns which make any statistic dependent on N (such as chi-square) uninformative. On the other hand, using the 1,522 persons who responded to Phase IV as a simple random sample yields incorrect population estimates, due to the failure to correct for nonresponse. In order to circumvent these problems, we employed a simple transformation of population weights which yields population estimates and reduces the N to 1,522 for the Phase IV sample. This allows us to assess the significance of trends in the data, on the assumption that our design yields an N which is equivalent to a simple random sample of 1,522, or a corrected proportion thereof.

FOOTNOTES

1. The target population did not include students from high schools supported by separate school boards, but did include students from private schools.

2. These variables were employed in a previous report to check the representativeness of the Phase III sample.

TABLE 2.1: COMPARISON OF (UNWEIGHTED) PHASE IV RESPONDENTS AND NONRESPONDENTS ALONG SELECTED SOCIO-DEMOGRAPHIC VARIABLES

Variable	Respondents (%)	Nonrespondents (%)	Corrected X^2 Significance
Sex			
Male	48.0	50.4	
Female	52.0	49.6	
N	1522	1033	.2354
SES			
1 Lowest	27.2	28.2	
2	24.4	28.3	
3	22.7	21.6	
4 Highest	25.6	21.8	
N	1455	957	.0603
Strata			
1 Urban	18.3	24.9	
2	22.3	21.8	
3	24.5	23.7	
4 Rural	35.0	29.6	
N	1522	1033	.0004
High School Grades			
B (70%) or higher	44.2	34.6	
Lower	55.8	65.4	
N	1494	1006	.0000
Religion			
Protestant	54.9	50.0	
Roman Catholic	30.9	35.2	
Jewish	1.1	1.1	
No religion	8.2	8.8	
Other	4.9	4.9	
N	1507	1021	.1742
Ethnic Self-Identification			
Canadian	83.3	79.0	
Other	16.7	21.0	
N	1506	1010	.0071

TABLE 2.2: COMPARISON OF PHASE IV RESPONDENTS AND NONRESPONDENTS ALONG SELECTED INTERVAL-LEVEL VARIABLES USING THE T-TEST STATISTIC

			Variance Difference		Mean Difference		
Variable	Respondent Mean	Nonresp. Mean	F[a]	Two-tail probability	T[b]	d.f.	Two-tail probability
Family educational encouragement score (FAMENC1)	-.0246	-.0591	1.01	.804	.85	2553	.395
Non family educational encouragement score (NFMENC1)	.0108	.0303	1.05	.357	1.01	2553	.313
Educational plans for fall 1974 (LEE)	2.1472	2.0113	1.02	.806	3.62	2027	.0000
Self-concept of ability to do post-secondary work (USCA1)	-.0030	-.0129	1.01	.920	1.70	2549	.090
Self-concept of ability relative to classmates (FSCA1)	.0042	-.0161	1.08	.191	3.51	2549	.0000
Blishen score of occupational aspiration in 1973 (VAR095)	55.59	54.39	1.02	.799	2.00	2310	.046
Blishen score of occupational expectation in 1973 (VAR097)	51.59	51.12	1.06	.365	.72	2082	.472

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[a] - The F statistic and its associated probability measure statistical differences in variances between the two groups.

[b] - Since in no case are the variances significantly different, the T-test is based on pooled variance estimates.

TABLE 2.3: A COMPARISON OF PHASE IV MAIL AND TELEPHONE RESPONDENTS ALONG SELECTED VARIABLES

A. SOCIO DEMOGRAPHIC VARIABLES

Variables	Mail Respondents (%)	Telephone Respondents (%)	X^2 Significance
Sex			
Male	45.5	53.8	
Female	54.5	46.2	
N	1067	455	.0032
Marital Status			
Single, engaged	52.9	53.2	
Married, common law, was married	47.1	46.8	
N	1057	455	.9589
SES			
1 Lowest	26.3	29.4	
2	23.9	25.5	
3	23.2	21.6	
4 Highest	26.6	23.4	
N	1020	435	.4005
Strata			
1 Urban	17.4	20.2	
2	21.6	23.7	
3	26.1	20.7	
4 Rural	34.8	35.4	
N	1067	455	.1147
High School Grades			
B (70%) or higher	47.9	35.4	
Lower	52.1	64.6	
N	1050	444	.0000
Religion			
Protestant	56.7	50.6	
Roman Catholic	28.5	36.6	
Jewish	1.3	0.7	
No religion	8.0	8.6	
Other	5.5	3.5	
N	1054	453	.0114
Ethnic Self-Identification			
Canadian	83.8	82.3	
Other	16.2	17.7	
N	1054	452	.5296

TABLE 2.3 (cont'd)

B. EDUCATIONAL AND OCCUPATIONAL ACHIEVEMENT VARIABLES

Variables	Mail Respondents (%)	Telephone Respondents (%)	X^2 Significance
Current Work Status			
Full-time	67.5	73.4	
Part-time	11.1	9.1	
Unemployed	4.6	6.9	
Student, housewife	16.7	10.6	
N	1063	451	.0033
Current School Status			
Full-time student	16.8	7.9	
Part-time student	4.8	3.8	
Non student	78.4	88.3	
N	1063	453	.0000
Educational Attainment in 1979			
Completed university	16.2	21.5	
Completed CAAT	9.8	19.3	
Some univeristy, CAAT	6.7	17.4	
No post-secondary	67.3	41.8	
N	2100	455	.0000
Blishen Category of Current Job			
1 Lowest	5.1	13.5	
2	14.4	20.9	
3	24.9	23.3	
4	36.6	27.3	
5	17.4	14.4	
6 Highest	1.7	0.6	
N	766	326	.0000
Current Job Pay			
1 Lowest	23.0	25.8	
2	27.3	23.2	
3	24.5	21.9	
4 Highest	25.2	29.1	
N	735	302	.2558
Challenge of Current Job from Factor Score			
1 Highly challenging	25.3	38.1	
2	29.5	22.0	
3	22.2	17.1	
4 Low challenge	23.0	22.9	
N	766	328	.0001

TABLE 2.4: COMPARISON OF PHASE IV MAIL AND TELEPHONE RESPONDENTS ALONG SELECTED INTERVAL-LEVEL VARIABLES USING T-TESTS

Variable	Mail Respondent Mean	Telephone Respondent Mean	Variance Difference		Mean Difference		
			F-Test	Two-Tail Probability	T-Test	d.f.	Two-Tail Probability
Family educational encouragement score (FAMENCI)	-.0146	-.0480	1.05	.531	.60	1520	.552
Non-family educational encouragement score (NFMENCI)	.0073	.0091	1.05	.511	-.21	1520	.834
Educational plans for fall 1974 (LEE)	2.1844	2.06	1.01	.946	2.49	1228	.013
Self-concept of ability to do university work (USCAI)	.0027	-.0162	1.17	.046	2.32	1517	.021
Self-concept of ability relative to classmates (FSCAI)	.0112	-.0124	1.02	.755	2.99	1517	.0003
Blishen score of occupational aspirations in 1973 (VAR095)	56.07	54.43	1.09	.271	1.91	1380	.057
Blishen score of occupational expectation in 1973 (VAR097)	52.07	50.42	1.01	.886	1.81	1247	.071
% time in current job processing information (C5INFO)	30.26	28.37	1.31	.003	1.16	552	.248
% time in current job dealing with people (C5PEOPLE)	31.90	30.77	1.38	.000	.66	544	.510
% time in current job doing manual work (C5MANUAL)	37.84	41.32	1.45	.000	-1.65	526	.100

Note: In the first 7, the T-test is based on pooled variance estimates, as the F statistic indicated no significant difference in variances. For the last three variables, significant variance differences were found and separate variance estimates were therefore used to calculate the T statistic.

TABLE 2.5: REPRESENTATIVENESS: ESTIMATED POPULATION PARAMETERS FOR THE GRADE 12 COHORT PHASE I AND PHASE IV[a]

	Phase I			Phase IV		
	Percentage	Confidence Interval[b]	Confidence Limits	Percentage	Confidence Interval[b]	Confidence Limits
Sex						
Male	49.1	.95	48.2 - 50.1	47.7	3.8	44.0 - 51.5
Female	50.9	.95	49.9 - 51.8	52.3	3.8	48.5 - 56.0
Family Income 1973						
Below $4000	2.2	0.6	1.6 - 2.8	1.8	0.3	1.5 - 2.1
4 - 7000	7.2	3.1	4.1 - 10.2	6.9	4.2	2.7 - 11.1
7 - 10000	16.7	0.9	15.8 - 17.6	17.1	2.1	14.9 - 19.2
10 - 13000	13.0	2.4	10.6 - 15.4	12.5	2.3	10.2 - 14.7
13 - 16000	12.0	1.5	10.4 - 13.5	12.3	2.8	9.4 - 15.1
16 - 19000	7.6	2.1	5.5 - 9.7	8.3	1.5	6.7 - 9.8
above 19000	11.1	2.4	8.7 - 13.5	11.4	3.5	7.9 - 14.9
Not known	30.3	3.3	27.0 - 33.5	29.8	5.6	24.3 - 35.4
Job Prestige 1973						
1 Lowest	15.9	3.7	12.3 - 19.6	15.8	3.6	12.2 - 19.3
2	36.9	4.2	32.8 - 41.1	35.8	3.0	31.9 - 39.8
3	16.5	1.1	15.4 - 17.6	16.4	1.9	14.5 - 18.3
4	10.5	2.9	7.6 - 13.3	9.7	3.7	5.9 - 13.4
5	12.0	2.9	9.1 - 14.8	13.7	3.2	10.5 - 16.9
6 Highest	8.2	1.7	6.5 - 9.9	8.7	1.2	7.4 - 9.9
High School Grades 1974						
B or higher	40.9	4.4	36.4 - 45.3	44.9	5.8	39.1 - 50.7
Lower	59.1	4.4	54.6 - 63.6	55.1	5.8	49.3 - 60.9
Educational Plans for fall 1974						
No post-secondary	23.3	3.3	20.0 - 26.6	21.1	3.9	17.2 - 25.0
CAAT	24.0	4.2	19.8 - 28.2	23.9	4.7	19.2 - 28.6
University	31.9	3.5	28.4 - 35.4	35.5	3.9	31.6 - 39.3
Not known	20.9	0.9	20.0 - 21.8	19.6	2.6	17.0 - 22.1
Self-Concept of Ability re Peers						
1 Lowest	27.0	2.2	24.8 - 29.2	25.0	2.9	22.1 - 27.8
2	29.7	2.2	27.5 - 31.9	28.7	3.5	25.2 - 32.2
3	19.6	2.0	17.5 - 21.6	21.2	3.6	17.5 - 24.8
4 Highest	23.8	4.1	19.6 - 27.9	25.2	3.2	21.9 - 28.4

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[a] - All numbers have been rounded for presentation. Missing values were excluded from calculations.

[b] - A 95% confidence limit was employed. This means that if we draw a large number of samples, the sample means will lie within the limits in 95 cases out of 100. The two-tail T statistic corresponding to 4 degrees of freedom and .05 probability level is 2.776. Thus, the confidence interval is calculated as 2.776 of variance.

CHAPTER THREE

HIGH SCHOOL EXPERIENCES: LOOKING BACK AT THE EARLY SEVENTIES

INTRODUCTION

The study of secondary schools by social scientists may be likened to the story of the blindfolded philosophers who are led to an elephant and requested to identify the mysterious substance. Each philosopher interprets the phenomenon, but in radically different ways. Similarly, in researching secondary schools, social scientists have selected different aspects for study and stressed the importance of different properties as institutions. Some emphasize how schools train students for basic life skills; others closely analyze the selection and allocation functions of schools for placement of young people into the stratification system of the larger society; still others examine the school as a miniature society, characterized by a unique system of rules and subcommunities organized around student differences in value orientation and behavior. In this chapter, our aim is to provide a descriptive account of some of the high school experiences of our sample. It is important to relate these experiences to subsequent post-secondary and work involvements.[1] Insofar as more than one-third of our sample have no post-secondary education, an exploration of this group's high school experiences and backgrounds may provide clues to their lack of motivation to carry on with their studies.

Five aspects of secondary school have been selected for describing and analyzing the experiences of respondents:

1. type of program (e.g., academic, commercial, technical, vocational);

2. participation in athletic and other general activities (e.g., social clubs, student government, drama clubs);

3. involvement in the leading crowd in high school;

4. how the respondent would like to be remembered in terms of his high school days (e.g., a brilliant student, leader in activities, most popular, outstanding athlete); and

5. the extent to which secondary school experiences were considered generally useful in developing a basic appreciation of ideas, ability to think clearly, and interpersonal and social skills; and secondly, vocationally useful in increasing chances of finding a good job and providing knowledge, skills, and other techniques directly applicable to one's present job.[2]

Our description of secondary school in terms of these five aspects will be complete only if important subgroup and social background differences are incorporated into the analysis. In the first part of this chapter, we explore and report variations by gender, rural/urban characteristics of the community surrounding the respondent's school (referred to as stratum or region), respondent's socioeconomic characteristics,[3] academic performance, and current educational attainment. We then demonstrate the effects of high school on subsequent educational, vocational, and selected social-psychological attributes of respondents, such as self-concept and degree of fatalism. Academic program in high school is viewed by many researchers in the field of education as providing a track to different kinds of educational attainment and, consequently, to different kinds of jobs, varying in their intrinsic or extrinsic rewards. Our purpose is to establish the association between program and the subsequent experiences and values of respondents.

Type of Program

While changes brought about by the Davis reforms of 1969 allowed greater flexibility in choice of program and courses, most respondents were able to identify their high school program as one of few types. Table 3.1 shows that nearly 7 in 10 respondents were enrolled in academic programs, the remainder being in commercial or technical courses. Proportionately more females than males were in an academic stream and many more females than males were enrolled in commercial programs. Technical programs were clearly male-dominated, recruiting almost one-third of the males enrolled and only 1.3% of the females.

Table 3.1 shows that selection of high school program was strongly related to the respondents' socioeconomic backgrounds and the urban characteristics of the communities in which they resided. While approximately 5 in 10 respondents in the lowest quartile of social class chose academic programs, more than 9 in 10 in the highest quartile made a similar selection. The reverse is true when the selection of commercial programs is examined; more than one-quarter of those from the lowest SES origins took commercial programs, compared to 3.9% in the high SES group. The choice of high school program also appears to be influenced by stratum. Seven to 8 in 10 respondents from Strata 1, 2 and 3 largely urban communities (including Metro Toronto) selected academic programs, compared with only half of the rural respondents; many more rural than urban respondents were enrolled in technical courses.[4]

Academic Performance

The academic performances of students in an academic track were superior to that of students in either commercial, technical, or vocational programs. Table 3.2 demonstrates that over 5 in 10 respondents in academic programs reported B or higher averages in Grade 11, in contrast to fewer than 4 in 10 in commercial, and more than 2 in 10 in technical or vocational programs.

High school programs play an obviously influential role with regard to the type and amount of post-secondary education respondents achieve. About 4 in 10 of those enrolled in the academic track have already graduated from university, compared to 4.1% from commercial and 7.4% from technical/ vocational streams. Most persons from the last two tracks received no post-secondary education (71.4% and 57.1% respectively).

Participation in Extracurricular Activities

Extracurricular school activities serve a variety of important functions, including channeling youthful energy in approved directions, promoting school cohesion, providing students with areas of achievement outside the classroom, and providing students and faculty with opportunities to interact outside the formal setting of the class.

When asked, retrospectively, about participation in high school extracurricular activities, respondents most frequently listed involvement in athletics; approximately 3 in 10 participated frequently or very frequently in team sports. Of nonathletic activities, music (e.g., choir, band) engaged the greatest amount of students' time, with nearly 2 in 10 participating frequently or very frequently. Most people seldom or never participated in many of the other activities offered by schools. Thus, over 8 in 10 students seldom or never participated in social action or political clubs, academic or drama clubs, or student government.

Participation activities were factor-analyzed and two main factors were identified: athletic participation and general (nonathletic) participation. Table 3.3 shows that the athletic factor bears little or no relation to SES or stratum, although gender is associated with the frequency of athletic involvement; males participated more fully than females at the highest level of athletic activity. If we consider general participation, however, sex does not influence degree of involvement, while SES relates positively; there are nearly twice as many high SES as low SES respondents in the high-participation category. There is also a greater tendency for Stratum 4 respondents to participate less frequently than Stratum 1 respondents in general activities. A general pattern (not statistically significant) indicates that people of rural origin participate less frequently in general activities than people of urban origin, though we have noted before that stratum is related to SES.

As shown in Table 3.4, participation in general activities relates positively to academic performance; more than 6 in 10 high participators have B or higher averages, compared with 4 in 10 respondents in the lowest participation category. It should be noted, however, that participation in athletics is not related to academic performance.

Frequency of participation in general activities is also related to formal level of post-secondary educational attainment. For instance, about half of the respondents in the highest participation category are now in graduate or professional schools or have graduated from university, compared with only 2 in 10 respondents in the lowest category.

Involvement in the Leading Crowd

Less than one-third of our sample believed that they were part of the leading crowd while in high school (Table 3.5). While gender and stratum do not relate significantly to being in the leading crowd, the latter does relate positively to SES and level of post-secondary attainment. Approximately 2 in 10 of those in the lowest SES quartile and nearly 4 in 10 of those in the highest quartile thought of themselves as part of the leading crowd. Moreover, as Table 3.6 demonstrates, nearly 4 in 10 of those who considered themselves part of the leading crowd, and about 3 in 10 who did not, obtained university degrees. Reported Grade 11 marks are not related to membership in a leading crowd.

High School Subcultures

Anyone observing student relationships in a neighborhood high school will soon notice a variety of primary ties. For some students, athletics act as the main source of attraction. Others seek popularity, or areas in which their leadership potential can be developed. Academic studies serve as the basis for yet another type of student subculture. To explore the types of subcultures that respondents entered, we asked: "If you could have been remembered at high school for one of the four things below, which one would you have wanted it to be?" Table 3.7 indicates that academic performance is a significant value; over 3 in 10 respondents wanted to be remembered as a "brilliant student." Over one-quarter chose "leader in activities," nearly one-quarter chose "outstanding athlete," and fewer than 2 in 10 wanted to be remembered as "most popular." There are marked differences indicated by gender, stratum, and post-secondary attainment. Proportionately more females than males stress the importance of being a brilliant student, and, conversely, more males than females emphasize athletics. A tendency exists for the more urban students to stress being remembered as a "brilliant student," while more rural respondents emphasized "outstanding athlete."

The way in which a respondent wishes to be remembered relates, as well, to academic success or performance in school. Table 3.8 shows that those who selected the "brilliant student" category were clearly superior students; almost 7 in 10 achieved B or higher averages in Grade 11. Fewer than 5 in 10 who chose "leader in activities," "most popular," or "outstanding athlete" obtained comparably high averages.

As one would expect, respondents wanting to be remembered as brilliant students disproportionately demonstrate an ability to gain access to a post-secondary education. Nearly 4 in 10 of these respondents graduated from university. The reverse is true for respondents wanting to be remembered as outstanding athletes; only 2 in 10 selecting this category graduated from university.

THE SOCIAL-PSYCHOLOGICAL DIMENSIONS

General and Job-Related Usefulness of Education

The past several decades have witnessed a general public unease concerning schools. Student protests in the sixties and mounting pressures to make education more responsive to changing times in the seventies exemplify this unease. In our survey, respondents were asked to examine their most recent educational experience and indicate its usefulness, both generally and in terms of job-related training. Among the eight aspects explored were: the development of an appreciation for ideas, the development of the ability to think clearly, the development of leadership ability, and the development of a career choice. Through the use of factor analysis, two factors were identified: a general usefulness and a usefulness that incorporates the relationship of education to job selection and training.

Using these factors, a comparison was conducted of four major educational attainment groups--university graduate, CAAT graduate, some university and/or some CAAT, and no post-secondary--revealing distinct differences between the groups.[5] As Table 3.9 shows in the "general usefulness" category, respondents with no post-secondary education (slightly more than 1 in 10) were least likely to evaluate their education as "very useful, while university graduates (over 4 in 10) were most likely to do so. Three in 10 CAAT graduates responded similarly. As one would expect, nearly 5 in 10 CAAT graduates stated that their most recent education experience was "very useful" for career identification or job training. Approximately 2 in 10 respondents from the remaining groups made the same selection. It is interesting to note that only 4.5% more university graduates than CAAT graduates felt their education was "rarely or not at all useful" in the job-related category.

We have now documented that formal level of education does relate to the perceived general and job-related usefulness of education. However, there are also differences by gender, social background, and academic performance in secondary school. Table 3.10 indicates that somewhat more females than males, high SES respondents, and academically superior respondents are more likely to stress their education as "very useful" in the "general usefulness" category. When we examine "job-related usefulness," similar trends can be identified for sex and grades. However, there is a reversal in the pattern with regard to SES; proportionately _fewer_ high SES respondents evaluate the job-related aspects of their education as "very useful." We also find that more rural than urban respondents endorse the job-related usefulness of their education. However, this finding may be a result of the association of stratum and SES. It is clear that socioeconomic status has a strong influence on the attitudes expressed by our respondents in this area.

Assessing the Impact of High School Experience

One important basis for stratification in secondary schools is the system of programs of study. These programs are designed to sort out students according to ability, with the intention of producing an efficient allocation of people for future post-secondary and occupational positions. Sorting procedures vary in different countries. Great Britain, for instance, has been criticized for starting the sorting process too early, thus favoring upper-middle class students and neglecting "late bloomers." In the United States, selection begins later; this has been considered inefficient because bright students are held back from fulfilling their academic potential.

Since sorting procedures were used in the high schools from which we drew our sample, it is important to examine the relationship of tracking (or streaming) to a person's life chances, values, and personality characteristics. We know, for example, that respondents who chose academic programs were disproportionately selected from upper-middle and middle class sectors of Ontario society. What we still need to explore are the future educational and occupational consequences of making certain program selections.

Education and Work by High School Program

Although choosing a commercial or technical program in high school does not exclude enrollment in a university, only 4.1% of those in a commercial and 7.4% of those in a vocational or technical program graduated from university. Fully 4 in 10 respondents from an academic program graduated from university (Table 3.11). The completion of a post-secondary program is strongly associated with type of program; nearly 6 in 10 of those in the academic stream completed a university or college education, while fewer than 2 in 10 enrolled in commercial programs and fewer than 3 in 10 in technical/vocational programs completed a degree or certificate.

Present work status also relates to high school programs, as shown in Table 3.11. The proportion of respondents from academic programs currently working full-time is significantly smaller than those from commercial and technical/vocational programs. Greater numbers of academic track respondents are studying full-time.

Job-related income and prestige[6] are two dimensions that measure, in part, the "pay-offs" of a high school education. More specifically, we might ask if an academic program makes a difference in the starting and current incomes earned by respondents. Does program relate to the prestige attached to the various jobs our respondents obtained after leaving high school?

The average starting salary of those who entered the labor market was $9,898 (Table 3.12). The starting salary differences proved significant, with those in academic programs ($10,158) and technical/vocational programs ($10,619) above the mean and respondents in commercial programs ($8,071) below the mean. The average current salary of working respondents is $12,952-$12,589 for former academic program students, $15,200 for technical/

vocational students, and $11,244 for commercial students. Clearly, the income gap has widened over time, when starting and current salaries of students from the different high school programs are compared.

Some complexities are revealed when the relationship of program and salary (both starting and current) is further analyzed by subgroups. In analyzing starting salaries (Tables 3.13-3.16), we find that the relationship of high school program and job salaries remains statistically significant for grades, gender, and region. However, in academic and commercial tracks, females earn relatively lower salaries than males. In cross-tabulating program by SES, the relationship of program and salary remains strong at the two lowest SES quartiles, but is diminished at the two highest quartiles. Thus, the impact of program is strongest for low SES and weaker for high SES respondents. The picture is quite different for current salaries (Tables 3.17-3.20). We find that gender and grades do not influence the association of program and salary. However, with respect to region, the association is sustained for smaller cities, and towns and rural areas, but strongly diminished in other urban centers. Thus, opportunity for income mobility appears greatest in the cities and overpowers the impact of high school program. Finally, although SES (at the high end) strongly influences starting salaries, as time goes on, this influence diminishes. In analyzing current salaries, we find a stable relationship of program and salary at each level of SES.

When the occupational prestige of those currently working is related to high school program (Tables 3.21-3.24), we find that respondents from the academic track enjoy relatively more prestige, with an average score of 50.2, than respondents from the commercial (47.6) and vocational/technical (42.9) tracks. This relationship is sustained for gender and grades, but is strongly diminished at the highest level of SES and the most urban area (i.e., Toronto).

Values

People were asked to provide us with the degrees of importance they attached to seven different values: developing friendships, involvement in work or a career, involvement in community affairs, marriage, living together with a companion or partner, involvement in leisure time activities, and developing an independent lifestyle (see Table 3.25). "Developing friendships" was mentioned most frequently as being very important and involvement in community affairs was mentioned least frequently. The fact that most people still adhere to the work ethic is supported by our finding that nearly 8 in 10 respondents felt work involvement was somewhat to very important in value. We also asked people which values stimulated the most and least satisfaction for them (Tables 3.26 and 3.27). Marriage was endorsed by 3 in 10 respondents as the most satisfying value area; work involvement was second, with nearly 3 in 10 indicating its contribution to their satisfaction. In contrast, nearly 5 in 10 respondents indicated that involvement in community affairs provided the least satisfaction. We thought that high school program might be related to these value preferences, but the subsequent analysis showed few differences. Only on the values of marriage and the development of an independent lifestyle are substantial differences apparent; respondents from a commercial track attach greater importance to marriage than those in academic and vocational/technical tracks.

High School Program and Personality

In this section we further explore the assumption that the social forces and conditions that lead adolescents to select high school programs are related to substantial differences in personality. Personality, as we have defined it, includes three elements: how people vary in cognitive style or outlook; the extent to which people consider themselves in control of their environment or, conversely, controlled by fate; and how people evaluate themselves, that is, self-concept. Cognitive style refers to two components: the desire to work on broadly defined or open-ended problems; and the desire to work on recognized and pressing problems, with the promise of immediate and identifiable solutions. Self-concept was measured through the use of a self-descriptive adjective checklist called the Semantic Differential. This scale has three components: good-bad for Evaluation, powerful-powerless for Potency, and fast-slow for Activity. Thus, we are able to evaluate a person's self-concept in terms of evaluation, potency, and activity.

Our assumption that high school program differences would relate to variations in cognitive styles was only mildly supported in the analysis. Those in an academic program possessed a higher preference for both broad and immediate problem-solving cognitive styles than did respondents in commercial or vocational/technical programs (Table 3.28).

The hypothesized relationship of program to respondent's self-concept received qualified support, as can be seen in Table 3.29. In two out of three instances (the evaluation and activity dimensions), significant variations were identified between respondents who had selected academic, commercial, and technical/vocational programs. No differences of note were identified on the potency dimension, but on the evaluative dimension of self-concept, respondents who had chosen academic programs characterized themselves as more valuable and desirable than respondents from commercial, technical, and vocational programs. These differences must be understood within the context of the social backgrounds and gender role experiences of respondents. We find the relationship of program is radically diminished on the evaluation and activity dimensions when SES and stratum are introduced, but is unaffected when gender is controlled. With respect to evaluation of self-concept, we find that high school track exerts an influence in the case of males, but not females. This may indicate the greater salience of program for sustaining a high self-evaluation among males. Similarly, we find the relationship between track and evaluation holds for those respondents achieving high grade averages, but is strongly diminished for those obtaining low averages. It may be that those who receive lower grade averages are less attached to any program in terms of their own self-appraisal. The relationship of the activity aspect of self-concept to high school program disappears when gender is introduced, being completely extinguished for males and strongly reduced for females. In addition, the relationship is largely reduced at high and low levels of grade average. This indicates the importance of understanding the complex and multiple ways our sense of self-worth and physical capability are developed. Although one's high school program may provide one source for developing self-labels, other academic and nonacademic influences play significant roles in developing and maintaining positive or negative self-images.

Finally, respondents were asked whether their outlook on life was guided by a "luck," or fate, principle, or by individual initiative and hard work. When fatalism is related to high school program (Table 3.30), we find no significant association between the two variables.

FOOTNOTES

1. The operational definitions and factors employed in this chapter are fully described in Appendix B.

2. These five aspects of secondary school experience were all investigated in the 1979 follow-up phase.

3. Socioeconomic status is referred to as SES in the remainder of this report.

4. It is important to note that SES and Strata are themselves correlated: over 50.0% of the respondents in the lowest quartile of SES were from the most rural Strata.

5. Each one of these educational attainment groups evaluate the usefulness of their educational experiences in terms of their most recent educational experience.

6. Job prestige is based on the Blishen scale, which is discussed fully in Chapter Six.

TABLE 3.1: TYPE OF HIGH SCHOOL PROGRAM BY SELECTED SOCIAL BACKGROUND FACTORS

	Social Background Factors									
	Sex		SES				Stratum			
	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Academic	63.4	74.4	49.7	62.6	74.1	90.6	84.1	72.2	70.8	55.5
Commercial	5.9	24.2	27.1	17.7	13.0	3.9	10.8	14.4	13.7	20.8
Technical/ Vocational	30.7	1.3	23.2	19.8	12.9	5.4	5.2	13.4	15.5	23.7
TOTAL (N)	720	786	374	347	330	383	338	330	354	485
Significance (p)										

TABLE 3.2: EDUCATIONAL OUTCOMES BY TYPE OF HIGH SCHOOL PROGRAM

Educational Outcomes	Type of Program in High School		
	Academic (%)	Commercial (%)	Technical/Vocational (%)
Grades			
(70%) of higher	52.1	33.8	23.3
Lower than 70%	47.9	66.2	76.7
TOTAL (N)	1020	229	227
Significance (p)			
Educational Achievement In 1979			
University graduate	41.3	4.1	7.4
CAAT graduate	19.2	15.8	21.3
Some university, some CAAT	16.2	8.7	14.1
No post-secondary	23.3	71.4	57.1
TOTAL (N)	1042	233	231
Significance (p)			

TABLE 3.3: ATHLETIC AND GENERAL (NON ATHLETIC) PARTICIPATION IN HIGH SCHOOL BY SELECTED SOCIAL BACKGROUND FACTORS

	Social Background Factors									
	Sex		SES				Stratum			
Type of Participation	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Athletic										
Highest	41.4	24.2	32.7	32.8	31.0	31.6	26.9	29.5	35.1	34.9
2	21.7	19.9	17.4	20.2	24.0	21.9	20.4	18.4	24.5	19.7
3	13.4	14.9	14.4	17.1	15.1	11.1	13.0	15.6	13.3	14.8
Lowest	23.4	40.9	35.4	29.9	29.8	35.5	39.6	36.6	27.1	30.6
TOTAL (N)	479	571	253	243	235	276	223	226	260	342
Significance (p)				N.S.				N.S.		
General (Non Athletic)										
Highest	18.9	18.8	14.3	13.9	18.9	28.5	22.5	16.1	16.4	20.1
2	27.1	30.5	19.2	31.1	28.3	35.2	36.1	28.0	26.8	26.4
3	22.2	23.0	26.0	24.4	22.5	18.6	17.1	27.0	24.5	21.9
Lowest	31.8	27.8	40.5	30.6	30.3	17.6	24.2	28.9	32.3	31.6
TOTAL (N)	453	550	240	232	227	263	213	216	249	323
Significance (p)	N.S.							0.05		

TABLE 3.4: EDUCATIONAL OUTCOMES BY PARTICIPATION IN ATHLETIC AND GENERAL HIGH SCHOOL ACTIVITIES

	Type and Degree of Participation							
	Athletic				General			
Educational Outcome	High (%)	2 (%)	3 (%)	Low (%)	High (%)	2 (%)	3 (%)	Low (%)
High School Grades								
70% or higher	46.3	49.0	48.5	49.9	62.0	53.0	46.0	38.9
Lower than 70%	53.7	51.0	51.5	50.1	38.0	47.0	54.0	61.1
TOTAL (N)	332	213	148	338	186	286	223	291
Significance (p)		N.S.						
Educational Achievement In 1979								
University graduate	33.3	34.5	32.2	33.7	52.1	37.2	30.9	21.5
CAAT graduate	18.9	22.4	16.5	17.9	16.9	19.4	20.4	17.9
Some university/ some CAAT	13.7	11.2	11.6	13.7	13.9	14.3	12.5	11.3
No post-secondary	34.1	31.9	39.7	34.7	17.2	29.1	36.2	49.3
TOTAL (N)	337	218	149	346	189	290	227	297
Significance (p)		N.S.						

TABLE 3.5: INVOLVEMENT IN THE LEADING CROWD BY SELECTED SOCIAL BACKGROUND FACTORS

	Social Background Factors									
	Sex		SES				Stratum			
Involvement In Leading Crowd	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Yes	32.6	28.6	23.8	26.2	33.8	37.5	29.9	30.7	29.5	31.5
No	67.4	71.4	76.2	73.8	66.2	62.5	70.1	69.3	70.5	68.5
TOTAL (N)	486	579	255	243	237	282	230	226	264	345
Significance (p)	N.S.						N.S.			

TABLE 3.6: EDUCATIONAL OUTCOMES BY INVOLVEMENT IN THE LEADING CROWD

	Involvement in Leading Crowd	
Educational Outcomes	Yes (%)	No (%)
Grades In Grade 11		
(70%) or higher	48.5	48.7
Lower than 70%	51.5	51.3
TOTAL (N)	318	729
Significance (p)	N.S.	
Educational Achievement In 1979		
University graduate	38.9	31.5
CAAT graduate	17.4	19.4
Some university/some CAAT	13.5	12.9
No post-secondary	30.1	36.2
TOTAL (N)	325	741
Significance (p)	0.09	

115

TABLE 3.7: HOW PEOPLE WOULD LIKE TO BE REMEMBERED BY SELECTED SOCIAL BACKGROUND FACTORS

	Social Background Factors									
	Sex		SES				Stratum			
How Remembered	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Brilliant student	22.6	37.4	32.2	25.7	30.9	33.8	34.0	33.1	26.9	28.8
Leader in activities	27.7	26.2	24.7	27.6	23.4	31.3	27.3	29.9	24.8	26.2
Most popular	18.8	17.8	16.3	21.1	17.6	17.3	19.0	17.7	18.6	17.9
Outstanding athlete	30.8	18.7	26.8	25.6	28.2	17.5	19.8	19.3	29.7	27.1
TOTAL (N)	649	721	346	317	298	347	295	299	328	448
Significance (p)								.05		

TABLE 3.8: EDUCATIONAL OUTCOMES BY HOW PEOPLE WOULD LIKE TO BE REMEMBERED

	How Remembered			
Educational Outcomes	Brilliant Student (%)	Leader in Activities (%)	Most Popular (%)	Outstanding Athlete (%)
Grades In Grade 11				
(70%) or higher	66.2	46.8	35.4	31.5
Lower than 70%	33.8	53.2	64.6	68.5
TOTAL (N)	408	363	246	330
Significance (p)				
Educational Achievement In 1979				
University graduate	39.2	32.8	30.8	20.5
CAAT graduate	17.2	22.6	20.6	16.1
Some university/some CAAT	15.9	13.8	12.0	14.0
No post-secondary	27.7	30.9	36.6	49.4
TOTAL (N)	417	369	250	335
Significance (p)				

TABLE 3.9: GENERAL AND JOB-RELATED USEFULNESS OF EDUCATION BY LEVEL OF EDUCATIONAL ATTAINMENT

	Educational Attainment			
Usefulness of Education	University Graduate (%)	CAAT Graduate (%)	Some University/ Some CAAT (%)	No Post-secondary (%)
General Usefulness				
Very useful	43.9	31.4	22.5	14.5
Frequently useful	29.2	28.6	18.2	27.0
Occasionally useful	15.6	21.2	27.6	22.2
Rarely or not all useful	11.3	18.8	31.7	36.3
TOTAL (N)	457	285	219	537
Significance (p)				
Job-Related Usefulness				
Very useful	22.0	47.0	22.1	22.4
Frequently useful	31.2	25.7	21.9	20.0
Occasionally useful	27.2	12.2	22.0	22.5
Rarely or not all useful	19.5	15.0	34.0	35.2
TOTAL (N)	457	285	219	539
Significance (p)				

TABLE 3.10: GENERAL AND JOB-RELATED USEFULNESS OF EDUCATION BY SELECTED SOCIAL BACKGROUND FACTORS AND ACADEMIC PERFORMANCE

	Social Background and Academic Performance											
	Sex		SES				Stratum				Grades	
Usefulness of Education	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)	B or Higher (%)	Lower than B (%)
General Usefulness												
Very useful	24.5	30.9	23.6	28.1	27.2	33.8	29.7	24.0	29.5	28.0	33.8	23.7
Frequently useful	26.4	26.9	28.8	25.6	26.3	26.2	23.5	30.3	24.8	27.7	29.4	24.7
Occasionally useful	21.7	19.9	20.9	20.0	19.1	21.6	21.1	22.1	21.3	19.4	18.6	22.0
Rarely or not all useful	27.4	22.2	26.7	26.2	27.5	18.4	25.7	23.7	24.4	24.9	18.2	29.6
TOTAL (N)	718	780	376	343	326	382	334	330	355	479	659	809
Significance (p)				.05				N.S.				
Job-Related Usefulness												
Very useful	25.0	28.7	27.6	29.7	27.2	23.2	21.2	26.0	27.2	31.3	28.5	26.4
Frequently useful	24.3	25.2	25.0	21.5	20.6	31.9	26.8	24.1	25.0	23.6	30.2	20.4
Occasionally useful	20.8	22.9	20.2	20.6	22.8	23.7	20.5	24.9	22.9	20.1	20.6	22.8
Rarely or not all useful	29.9	23.2	27.2	28.2	29.5	21.1	31.5	25.0	24.8	25.0	20.6	30.3
TOTAL (N)	719	780	376	345	326	382	334	330	355	481	859	811
Significance (p)	.03							.08				

TABLE 3.11: LEVEL OF EDUCATIONAL ATTAINMENT AND CURRENT WORK STATUS BY HIGH SCHOOL PROGRAM

	High School Program		
	Academic (%)	Commercial (%)	Technical Vocational/ (%)
Educational Attainment			
University graduate	41.3	4.1	7.4
CAAT graduate	19.2	15.8	21.3
Some university/some CAAT	16.2	8.7	14.1
No post-secondary	23.3	71.4	57.1
TOTAL (N)	1042	233	231
Significance (p)			
Current Work Status			
Full-time	64.3	71.8	86.7
Part-time	11.3	9.6	6.4
Unemployed	5.4	5.9	3.8
Student/housewife	19.0	12.6	3.1
TOTAL (N)	1035	233	231
Significance (p)			

TABLE 3.12: PRESTIGE, STARTING AND CURRENT SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM

	High School Program		
	Academic	Commercial	Technical Vocational/
Job Prestige			
Averages	50.2	47.6	42.9
Standard deviations	11.4	9.5	12.3
TOTAL (N)	708	168	203
Significance (p)			
Starting Salaries			
Averages	10,158.4	8,071.5	10,619.1
Standard deviations	3,793.2	3,339.1	4,309.9
TOTAL (N)	672	151	189
Significance (p)			
Current Salaries			
Averages	12,589.4	11,244.2	15,200.8
Standard deviations	4,070.2	3,029.1	4,252.5
TOTAL (N)	677	157	190
Significance (p)			

TABLE 3.13: STARTING SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON SEX

	High School Program		
Starting Salary	Academic	Commercial	Technical/ Vocational
Males			
Averages	11,371.3	9,703.7	10,624.5
Standard deviations	4,110.1	3,885.9	4,321.8
TOTAL (N)	311	34	181
Significance (p)		0.03	
Females			
Averages	9,114.0	7,594.9	10,495.7
Standard deviations	3,149.8	3,017.0	4,309.6
TOTAL (N)	362	117	8
Significance (p)			

TABLE 3.14: STARTING SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON SES

	High School Program		
Starting Salary	Academic	Commercial	Technical Vocational/
Lowest SES			
Averages	9,562.8	7,303.4	10,862.8
Standard deviations	3,426.1	2,807.0	4,515.0
TOTAL (N)	117	67	73
Significance (p)			
Low SES			
Averages	10,768.0	8,172.5	10,115.0
Standard deviations	4,000.7	3,590.2	4,359.5
TOTAL (N)	149	40	55
Significance (p)			
High SES			
Averages	9,911.9	8,856.1	10,769.2
Standard deviations	4,239.9	3,745.3	4,340.5
TOTAL (N)	168	29	36
Significance (p)		N.S.	
Highest SES			
Averages	10,435.9	11,297.2	9,745.7
Standard deviations	3,450.6	3,014.5	3,240.7
TOTAL (N)	207	9	16
Significance (p)		N.S.	

TABLE 3.15: STARTING SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON STRATUM

	High School Program		
Starting Salary	Academic	Commercial	Technical/ Vocational
Urban - Big City			
Averages	10,088.0	8,613.8	10,041.9
Standard deviations	2,911.3	3,639.9	3,470.5
TOTAL (N)	190	25	15
Significance (p)		0.08	
Urban - Larger Cities			
Averages	10,139.5	7,815.1	10,064.9
Standard deviations	3,365.4	3,116.3	3,756.1
TOTAL (N)	143	31	31
Significance (p)			
Rural - Smaller Cities			
Averages	10,573.9	9,121.8	12,249.4
Standard deviations	4,149.0	3,135.3	4,780.4
TOTAL (N)	155	33	44
Significance (p)			
Rural - Towns and Rural Areas			
Averages	9,893.9	7,423.1	10,163.2
Standard deviations	4,530.7	3,333.3	4,248.0
TOTAL (N)	184	62	99
Significance (p)			

3.16: STARTING SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON GRADES

	High School Program		
Starting Salary	Academic	Commercial	Technical/ Vocational
B or Higher			
Averages	10,191.8	7,775.6	11,117.6
Standard deviations	3,507.5	3,030.9	3,940.7
TOTAL (N)	329	52	39
Significance (p)			
Lower Than B			
Averages	10,198.6	8,218.1	10,571.8
Standard deviations	4,088.7	3,515.1	4,404.2
TOTAL (N)	327	96	147
Significance (p)			

3.17: CURRENT SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON SEX

	High School Program		
Current Salary	Academic	Commercial	Technical/ Vocational
Males			
Averages	14,141.9	13,025.8	15,283.9
Standard deviations	4,419.0	3,626.6	4,272.8
TOTAL (N)	314	37	182
Significance (p)			
Females			
Averages	11,246.3	10,702.8	13,295.0
Standard deviations	3,189.3	2,607.5	3,440.7
TOTAL (N)	363	120	8
Significance (p)		0.03	

TABLE 3.18: CURRENT SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON SES

	High School Program		
Current Salary	Academic	Commercial	Technical/ Vocational
Lowest SES			
Averages	12,383.3	10,759.5	15,036.6
Standard deviations	3,987.5	2,367.9	3,720.9
TOTAL (N)	117	68	74
Significance (p)			
Low SES			
Averages	13,227.7	11,153.1	14,803.4
Standard deviations	3,925.9	3,225.5	5,170.4
TOTAL (N)	148	42	55
Significance (p)			
High SES			
Averages	12,766.8	11,118.6	15,739.1
Standard deviations	4,470.9	3,560.6	4,057.0
TOTAL (N)	171	30	36
Significance (p)			
Highest SES			
Averages	12,365.2	15,386.8	15,301.5
Standard deviations	3,970.9	2,223.7	4,408.8
TOTAL (N)	235	9	16
Significance (p)			

TABLE 3.19: CURRENT SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON STRATUM

	High School Program		
Current Salary	Academic	Commercial	Technical/ Vocational
Urban - Big City			
Averages	12,487.5	11,610.8	15,072.7
Standard deviations	3,575.1	2,477.0	3,479.6
TOTAL (N)	191	25	16
Significance (p)		N.S.	
Urban - Larger Cities			
Averages	12,946.9	11,451.5	14,994.6
Standard deviations	3,956.0	2,804.3	4,327.4
TOTAL (N)	147	35	31
Significance (p)			
Rural - Smaller Cities			
Averages	12,754.5	11,356.7	16,419.4
Standard deviations	4,047.1	3,413.8	4,583.6
TOTAL (N)	155	35	45
Significance (p)			
Rural - Towns and Rural Areas			
Averages	12,267.6	10,922.8	14,753.3
Standard deviations	4,632.0	3,156.3	4,140.1
TOTAL (N)	184	63	99
Significance (p)			

TABLE 3.20: CURRENT SALARIES IN PRESENT JOB BY HIGH SCHOOL PROGRAM, FILTERING ON GRADES

	High School Program		
Current Salary	Academic	Commercial	Technical/ Vocational
B or Higher			
Averages	12,348.9	10,897.5	15,922.3
Standard deviations	3,668.7	2,557.6	3,793.8
TOTAL (N)	331	54	39
Significance (p)			
Lower			
Averages	12,895.9	11,439.1	15,065.8
Standard deviations	4,490.3	3,285.3	4,378.7
TOTAL (N)	329	100	148
Significance (p)			

TABLE 3.21: JOB PRESTIGE BY HIGH SCHOOL PROGRAM, FILTERING ON SEX

	High School Program		
Job Prestige	Academic	Commercial	Technical/ Vocational
Males			
Averages	50.2	42.8	42.6
Standard deviations	11.4	13.4	13.2
TOTAL (N)	333	39	194
Significance (p)			
Females			
Averages	50.2	49.0	49.3
Standard deviations	13.9	7.5	13.9
TOTAL (N)	375	130	9
Significance (p)			

TABLE 3.22: JOB PRESTIGE BY HIGH SCHOOL PROGRAM, FILTERING ON SES

	High School Program		
Job Prestige	Academic	Commercial	Technical/ Vocational
Lowest SES			
Averages	49.1	46.7	39.7
Standard deviations	11.9	9.7	10.5
TOTAL (N)	127	72	80
Significance (p)			
Low SES			
Averages	50.6	47.0	44.1
Standard deviations	11.3	9.0	13.1
TOTAL (N)	152	44	60
Significance (p)			
High SES			
Averages	50.1	47.1	46.0
Standard deviations	10.4	8.8	14.2
TOTAL (N)	181	34	38
Significance (p)		0.06	
Highest SES			
Averages	51.1	56.6	47.1
Standard deviations	32.0	6.5	11.1
TOTAL (N)	214	11	17
Significance (p)		N.S.	

TABLE 3.23: JOB PRESTIGE BY HIGH SCHOOL PROGRAM, FILTERING ON STRATUM

	High School Program		
Job Prestige	Academic	Commercial	Technical/ Vocational
Urban - Big City			
Averages	51.4	51.4	47.5
Standard deviations	10.6	5.7	9.1
TOTAL (N)	195	31	16
Significance (p)		N.S.	
Urban - Larger Cities			
Averages	51.8	49.4	45.4
Standard deviations	10.8	7.8	12.3
TOTAL (N)	154	35	35
Significance (p)			
Rural - Smaller Cities			
Averages	50.4	48.0	42.2
Standard deviations	11.4	8.5	13.3
TOTAL (N)	164	35	46
Significance (p)			
Rural - Towns and Rural Areas			
Averages	47.7	44.8	41.7
Standard deviations	12.3	11.3	12.2
TOTAL (N)	195	68	107
Significance (p)			

TABLE 3.24: JOB PRESTIGE BY HIGH SCHOOL PROGRAM, FILTERING ON GRADES

	High School Program		
Job Prestige	Academic	Commercial	Technical/ Vocational
B or Higher			
Averages	52.7	50.6	45.6
Standard deviations	11.3	4.8	13.7
TOTAL (N)	340	56	43
Significance (p)			
Lower Than B			
Averages	48.1	45.8	42.1
Standard deviations	10.9	10.8	11.9
TOTAL (N)	351	109	157
Significance (p)			

TABLE 3.25: IMPORTANCE OF VARIOUS PERSONAL VALUES BY HIGH SCHOOL PROGRAM

	High School Program		
Personal Values	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Developing Friendships			
Very important	58.2	65.0	55.7
Somewhat important	40.7	34.3	42.7
Not very important	1.1	0.7	1.5
TOTAL (N)	1034	228	225
Significance (p)		N.S.	
Involvement in Work/Career			
Very important	43.2	42.0	46.7
Somewhat important	53.1	53.1	51.4
Not very important	3.7	4.9	1.9
TOTAL (N)	1034	228	224
Significance (p)		N.S.	
Involvement in Community Affairs			
Very important	6.8	8.6	8.7
Somewhat important	58.0	61.1	55.3
Not very important	35.2	30.3	36.0
TOTAL (N)	1031	226	224
Significance (p)		N.S.	
Marriage			
Very important	44.4	56.3	48.9
Somewhat important	37.6	31.3	32.6
Not very imporant	18.0	12.4	18.5
TOTAL (N)	1032	228	224
Significance (p)			
Living with Companion			
Very important	27.1	33.8	30.8
Somewhat important	37.6	30.4	34.5
Not very important	35.3	35.8	34.7
TOTAL (N)	1004	221	223
Significance (p)		N.S.	
Involvement in Leisure Activities			
Very important	45.1	45.8	45.4
Somewhat important	52.3	50.3	51.1
Not very important	2.6	3.9	3.5
TOTAL (N)	1033	228	225
Significance (p)		N.S.	
Developing Independent Life Style			
Very important	97.8	86.5	72.7
Somewhat important	1.5	9.1	14.0
Not very important	0.7	4.4	13.3
TOTAL (N)	124	27	26
Significance (p)			

TABLE 3.26: PERSONAL VALUES PROVIDING MOST SATISFACTION BY HIGH SCHOOL PROGRAM

	High School Program		
Personal Values	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Developing friendships	22.0	17.6	19.6
Involvement in work/career	19.0	12.7	17.4
Involvement in community affairs	1.0	0.4	0.5
Marriage	23.1	42.9	31.8
Living with companion/partner	5.0	3.8	5.5
Involvement in leisure activities	12.3	9.4	15.2
Developing independent life style	12.8	8.6	5.7
Other	4.9	4.7	4.3
TOTAL (N)	1022	225	222
Significance (p)			

TABLE 3.27: PERSONAL VALUES PROVIDING LEAST SATISFACTION BY HIGH SCHOOL PROGRAM

	High School Program		
Personal Values	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Developing friendships	2.2	2.0	0.8
Involvement in work/career	10.4	8.1	4.8
Involvement in community affairs	46.7	45.7	50.0
Marriage	13.5	12.3	13.5
Living with companion/partner	14.6	13.6	13.9
Involvement in leisure activities	3.7	5.7	5.6
Developing independent life style	8.5	11.8	10.1
Other	0.2	0.9	1.4
TOTAL (N)	991	217	216
Significance (p)			

TABLE 3.28: BROAD AND IMMEDIATE COGNITIVE STYLE PREFERENCES BY HIGH SCHOOL PROGRAM

	High School Program		
Cognitive Style	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Broad Style			
Low preference	18.0	15.5	11.3
Medium low preference	45.3	54.2	55.6
Medium high preference	17.3	17.4	18.1
High preference	18.6	12.9	14.9
TOTAL (N)	1042	233	231
Significance (p)			
Immediate Style			
Low preference	17.1	21.6	16.6
Medium low preference	45.3	53.3	56.7
Medium high preference	17.2	11.9	15.5
High preference	20.4	13.2	11.2
TOTAL (N)	1042	233	231
Significance (p)			

TABLE 3.29: EVALUATIVE, POTENCY AND ACTIVITY COMPONENTS OF SELF-CONCEPT BY HIGH SCHOOL PROGRAM

	High School Program		
Self-concept	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Evaluative			
Highest	30.2	27.2	29.5
Moderately high	24.6	19.5	17.8
Moderately low	24.2	22.0	22.3
Lowest	21.1	31.3	30.4
TOTAL (N)	754	150	140
Significance (p)		.05	
Potency			
Highest	30.8	24.7	22.0
Moderately high	23.9	21.3	29.0
Moderately low	22.7	24.4	25.2
Lowest	22.6	29.6	23.8
TOTAL (N)	754	150	140
Significance (p)			
Activity			
Highest	26.3	37.7	30.4
Moderately high	24.0	22.7	21.0
Moderately low	24.2	13.5	20.7
Lowest	25.5	26.1	27.9
TOTAL (N)	754	150	140
Significance (p)		.04	

TABLE 3.30: SENSE OF FATALISM BY HIGH SCHOOL PROGRAM

Fatalism	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Evaluative			
Highly fatalistic	24.8	27.5	17.2
Moderately fatalistic	29.6	26.6	25.7
Moderately low fatalistic	22.7	25.6	29.6
Low fatalism	22.9	20.3	27.5
TOTAL (N)	757	150	140
Significance (p)		N.S.	

(High School Program spans Academic, Commercial, Technical/Vocational)

CHAPTER FOUR

POST-SECONDARY EDUCATION: GOING TO UNIVERSITIES AND COLLEGES

INTRODUCTION

In this chapter we examine the community college and university experiences of our former Grade 12 students to 1979. Most of our respondents probably have completed their education, though undoubtedly, many will take short courses at work, or manpower retraining, or extension courses for pleasure. The adoption of paid educational leaves on a broad scale for mature adults might well encourage many more to return to the pursuit of degrees and diplomas. Indeed, excluding the 14.3% of respondents currently enrolled (as reported in item A.10), 47.1% of our sample indicated that it is very or somewhat likely they would enroll in CAATs or universities within the next five years (N = 1,305). In comparing university and CAAT students, we shall consider such topics as: educational attainment in relation to socioeconomic background, gender, urban/rural origin, high school program, course length, degrees and majors, degree completion, the financing of post-secondary education, reasons for choosing major or area of specialization, and general satisfaction with the post-secondary experience.

Table 1.2 of Chapter 1 shows the educational attainment of our sample in terms of ten possible educational outcomes, ranging from attending graduate or professional school to completing high school only. To review this information on educational attainment, 3 in 10 respondents graduated from universities (including the 6.4% currently

141

enrolled in graduate or professional schools); an additional 1 in 10 had some university; almost 3 in 10 attended CAATs, with 60% of these graduating; and almost 4 in 10 completed high school only. In order to simplify the discussion in this chapter, we shall often collapse the categories of Table 1.2 further by speaking of three kinds of enrollments: university enrollment only, CAAT enrollment only, and enrollment in both CAAT and university. These categories include individuals with and without degrees, but exclude individuals with no post-secondary educational experience.[1]

Of the 6 in 10 persons with post-secondary education, half had university enrollment, about 35% had CAAT enrollment, and 13.4% had both. That this last group is small bears testimony to the Ontario government's intention (in contrast to some other provinces) to have CAATs constitute a separate educational stream, rather than serve as transfer institutions into universities. We have kept this small group separate for analysis since, in a tightening job market for the highly educated, there may be a growing temptation to complement a general education with a specific skill training through a CAAT. It should be noted that this group is diverse, with almost one-third having CAAT diplomas and some university experience, almost one-third with only some university and some CAAT, and the remaining third split between university graduates with CAAT diplomas and university graduates with only some CAAT experience.

WHO GOT WHAT KIND OF EDUCATION

Ontario community colleges are oriented toward vocational training, while universities emphasize a general liberal arts education. It is

142

relevant to ask if these two distinct educational streams recruit different kinds of young persons--different in terms of background characteristics such as gender, socioeconomic status, program and grades in high school, urban/rural origin, and occupational expectations. In this section we shall examine such differences with respect to enrollment in a CAAT, university, or in both kinds of schools.

Gender in Relation to Educational Attainment

In Table 4.1, gender has only a modest relationship to proportion in post-secondary institutions. 30.7% of men in our sample were enrolled in CAATs, 57.1% in universities, and 12.1% had both CAAT and university experience; for women, 39.2% attended CAATs, 46.3% attended universities, and 14.5% attended both. Thus, women tend to opt more frequently for specific job training at CAATs than the more general education offered by universities. In the more detailed educational attainment data of Table 1.2 men somewhat more frequently than women were in graduate or professional schools, had some university but did not graduate, and had some CAAT experience but did not graduate. Equal proportions of men and women graduated from university and had some CAAT experience, but women graduated more frequently from CAATs.

The relationship of gender to education is further discussed in each section below.

Socioeconomic Status in Relation to Educational Attainment

When enrollment in post-secondary institutions is examined, there is a strong relationship between socioeconomic status and selection of institution. Referring to the SES portion of Table 4.1, 4 in 10 individuals from each of the two lower SES groups enrolled in universities and about 5 in 10 enrolled in community colleges; almost 5 in 10 of the medium-high SES group went on to universities, with 4 in 10 going to CAATs; but, almost 7 in 10 from the high SES group chose universities, compared with 2 in 10 going to CAATs. The highest SES group stands out clearly from the other levels, showing a marked preference for university education. Approximately 1 in 10 persons from three of the four SES levels enrolled in both university and CAAT, the exception being the medium-high SES group, for which the proportion was almost 2 in 10.

In terms of attracting students from different SES levels, the CAATs draw rather evenly from across the class structure, while universities draw heavily from the highest SES level. Part B of Table 4.2 shows what might be termed the recruitment into enrollments based on social background. The SES portion of Part B indicates that CAATs drew 3 in 10 of their enrollees from each of the two lower SES groups and 2 in 10 from each of the two higher groups. In contrast, universities drew only 15.2% of their enrollees from the lowest SES level, about 2 in 10 enrollees from each of the two middle levels, but almost 5 in 10 from the highest group.

The special affinity of higher SES persons for a university experience is further shown in Table 4.3, which gives detailed educational attainment by SES origin group. Any educational attainment group involving university--a CAAT diploma/certificate and some university, for example--drew more than half of its enrollees from the top two SES quartiles. Graduate and professional schools drew almost 60% of enrollees from the highest SES group; this SES group was found in a university degree cateogry at least twice as often as any other group.

The full relationship of SES to post-secondary education is not revealed, however, until the no post-secondary group is included in the analysis. Part A of Table 4.2 shows the educational destination patterns of SES groups, with the no post-secondary group added to the other three categories. From this part of the table it is clear that the high SES group was overwhelmingly oriented toward more education after high school (9 in 10 cases). In contrast, only half of the low SES group went to post-secondary institutions (2 in 10 to universities, 2 in 10 to CAAT, and 5% to both kinds of schools).

There has been much concern in the past with the effect of high school tracking on post-secondary educational opportunity, tracking being the early student assignment to two, four, and five-year programs, of which only the last led to university. With the introduction of the credit system in Ontario high schools in 1969, through the creation of CAATs, through part-time evening education at universities, and through special mature student admission policies at universities, restriction of opportunity due to tracking was greatly reduced. In our 1979 survey we asked for the high school programs of our respondents, in order to assess any effect of track or program. The relationship of high school program to detailed educational attainment is shown in Tables 4.7 and 4.8.

In Chapter Three we noted that there are some major gender differences in original high school program (see Table 3.1): almost three-quarters of women were in the academic stream, with one-quarter in the commercial course, and hardly any women in the technical or vocational program; for men, 6 in 10 were in the academic stream, 3 in 10 in the technical or vocational program, and less than 1 in 10 in the commercial course. With respect to enrollments (Table 4.6), students in the academic program have had the most varied achievements, as would be expected from the heavy concentration of students. From the academic program, one-quarter of both men and women did not go on to further education, an equality between gender groups not found in the other programs; 15.2% of men and 26.7% of women went to CAATs; but 5 in 10 men went to universities, compared to 4 in 10 women. Three-quarters of the commercial stream women did not take any post-secondary education at CAATs or universities, almost 2 in 10 attended CAATs, and only 3.9% went to universities. Six in 10 men from technical and vocational programs had no further education, though one-quarter continued on to CAATs and 10.4% attended universities. It becomes apparent that most commercial and technical/vocational students go directly from high school into the labor force (6 to 7 in 10); universities overwhelmingly recruit from the academic program (9 in 10); and CAATs recruit 7 in 10 from the academic stream, 1 in 10 from the commercial course, and 2 in 10 from the technical and vocational programs (see the lower portion of Table 4.5). Thus, the academic program is the program of further educational opportunity, whereas commercial and technical/vocational programs seem to track people away from universities and CAATs.

It can be argued that socioeconomic status affects academic program in high school and, thus, the effect of program on post-secondary educational attainment is not pure. In fact, our data show that, to some extent, academic program mediates the effect of SES on educational attainment. Table 3.2 in Chapter Three clearly indicates that high school program is related to SES. To review these findings, half of the low SES students were in commercial and technical programs, this being the case for 4 in 10 medium-low SES students, 3 in 10 medium-high SES students, but only 1 in 10 high SES students. In tables not presented here, we cross-tabulated high school program by educational attainment by socioeconomic status. This three-way analysis shows that, of low SES students who entered the academic program in high school, 70% went on to post-secondary institutions, with 3 in 10 obtaining university degrees and 3 in 10 receiving CAAT diplomas/certificates. In contrast, 70%-80% of low SES individuals who enrolled in commercial and technical/vocational courses entered the labor market directly and have had no post-secondary education. This pattern also holds for the medium-low and medium-high SES groups, except that somewhat more commercial and technical/vocational students had some post-secondary education. The pattern changes dramatically for high SES individuals. Few of this group were in commercial and technical/vocational programs (1 in 10) and, of all high SES persons, 7 in 10 have now had some university contact. In summary, for those individuals not in the highest SES group, entering and staying in the academic program in high school is conducive to post-secondary education.

Grades in High School in Relation to Educational Attainment

In Chapter Three we showed that grades in high school--a measure of academic performance--are related to program and to later educational attainment. Approximately half of the students in the academic program were above the 70% line (overall grade performance reported for Grade 11), while from 66-76% of commercial and technical/vocational students reported grades below 70% (upper portion of Table 3.2). The fact that high school grades predict educational attainment (Table 4.6) is a

117

consequence of the higher admission standards of universities, and the fact that commercial and technical/vocational students obtain lower marks than academic program students, thus being eligible less frequently for university enrollment. To the extent that high schools might have a policy of giving lower grades to commercial and technical/vocational students (reflecting a social class bias), they would be tracking such students out of universities--a push factor, so to speak. On the other hand, CAATs might be viewed as magnets, attracting commercial and technical/vocational students by the skill and trade programs that they offer.

Area of Origin in Relation to Educational Attainment

Urban/rural origin is strongly related to post-secondary educational attainment and it is worth exploring this variable in some depth. In originally selecting schools for study, care was taken to insure that schools were selected equally from four strata, these strata falling on a continuum from highly urban areas to rural areas. We have labeled these strata "big city," "larger cities," "smaller cities," and "towns and rural areas," (also labeled Stratum 1 to Stratum 4 respectively). As mentioned in Chapter Two, our best response rate in Phase IV came from the "towns and rural areas" and the worst came from the "big city." In the earlier phases, there were proportionately more "towns and rural areas" than "big city" individuals (29.6% versus 24.9%); this difference was augmented somewhat in Phase IV (32.2% "smaller cities" respondents compared to 22.3% "big city" respondents on a weighted basis). The effect of community background can therefore be examined by employing the variable stratum in our analysis.

The relationship of stratum to educational attainment is indicated in Tables 4.3 and 4.4, and is summarized in terms of enrollment in Tables 4.1 and 4.2. Table 4.2 shows that 3 in 10 individuals from each of the first three strata ("big city," "larger cities," and "smaller cities") have had no post-secondary education, compared with 5 in 10 "towns and rural areas" individuals. Table 4.1 shows that, of respondents who pursued post-secondary education, 50%-60% in the first three strata enrolled in universities and from one-quarter to one-third enrolled in CAATs. Only 40% of the respondents from Stratum 4 enrolled in universities and 5 in 10 entered CAATs. Individuals with both CAAT and university experience came least often from "towns and rural areas" and about equally from the other three strata. Thus, the overall rate of post-secondary educational experience is 74% in "big city," 67% in "larger cities" and "smaller cities," and 52% in "towns and rural areas."

The affinity of smaller area persons for CAATs might, in part, reflect the greater geographic accessibility of CAATs, compared with universities; but, as Table 4.9 shows, 67.1% of the "towns and rural areas" individuals who last attended CAATs left home to do so. Still, from "big city" to the "towns and rural areas", the proportion leaving home to attend CAATs or universities increases, more for university than for CAAT students. It is clear, then, that the young people of the "towns and rural areas," and even from the "smaller cities," desire or must expect to leave home to pursue post-secondary education. In itself, geographic origin has an important impact on the decision to continue education after high school.

Moving from home to attend a CAAT or university may act as a deterrent to further education for young people from lower socioeconomic families because of the extra cost involved. As we have noted before, the "towns and rural areas" stratum has the greatest proportion of low SES families in our sample. Four in 10 individuals in this stratum have low SES origins, while the proportions of low SES individuals in the other strata are almost half this or less (Table 4.10). Conversely, 4 in 10 "big city" individuals are of high SES origins (in contrast to 15% in the rural areas). Rural background, therefore, works a double hardship on many individuals in pursuit of post-secondary education: there is a greater likelihood of coming from an economically deprived family, and the desired education will likely require a move away from home, thereby involving an extra expense not required of most urban-origin students.

It is important to ask if high school program has a relationship to stratum, since high schools in towns and rural areas may have more limited program offerings and may not promote post-secondary education (university, in particular) as much as schools in the more urban areas. Table 4.11 shows that there is a significant relationship between stratum and high school program (already noted in Chapter Three). Compared with the other three strata, rural-area high schools had fewer students in the academic program, and more students in the commercial and technical/vocational courses. Almost 5 in 10 "towns and rural areas" men were in the technical or vocational program, in contrast to 1 in 10 men in the "big city;" 34% of the "towns and rural areas" women were in the commercial program, compared with 18% in the "big city."

However, since program is related to SES, SES must be controlled in order to assess the pure effect of program in relation to stratum.

Table 4.12 cross-tabulates high school program by stratum by gender by SES. Here, we see that there were fewer low and medium-low SES students in the academic program in "towns and rural areas" (4 in 10 men and 6 in 10 women) than in the "big city" (8 in 10 men and 6 in 10 women). Instead, lower SES students in the rural areas were more frequently found in the commercial and technical/vocational courses. For the two higher SES levels, the proportions of individuals in the academic program were high for all strata. In the highest SES group (data not shown), 84%-94%, depending on stratum, were in the academic stream and only 6%-16% were in commercial and technical/vocational courses. Even in the two higher SES groups, however, "towns and rural areas" stands out as different, mainly with respect to the behavior of men; fewer rural-area individuals were in the academic program.

The source, then, of the marked difference between the post-secondary education pattern for the "towns and rural areas" stratum and the other strata lies in the compounding of stratum and SES. To make matters more complex, gender makes a further difference, but only at the high SES level. To begin with, there are more low socioeconomic status families in the rural areas than in the other strata; that is, families whose children opt more often for a CAAT than a university education. Furthermore, the high schools in the rural areas attract and hold many fewer low SES youth to their academic programs, and, as we have already seen, the commercial and technical/vocational courses primarily lead to a CAAT rather than a university education, if further education is pursued. Finally, high status respondents in all strata overwhelmingly chose the academic course. But--and this is significant--fewer of these respondents in the towns and rural areas went on to universities; more went to CAATs or directly to work than did young people from other areas (see Table 4.13). This is not an effect of SES or high school program, but of stratum itself. It is also the case that high SES women from rural areas more frequently went to universities than to CAATs, contrary to the general pattern for women; however, high SES women in all strata typically favored a university education.

Occupational Expectations in High School in Relation to Educational Attainment

Occupational expectations in high school are related to post-secondary educational attainment. In the first phase of our study we obtained the occupational expectations of our Grade 12 students. Clearly, such goals are based upon different degrees of commitment, ranging from low, when occupational choice is only an indication of tentative interest, to high, when occupational choice is strongly and unwaveringly held. For those with a weak commitment, educational goals might, therefore, be independent of occupational choice. Still, even the Grade 12 students with little commitment have probably pondered the relationship of further education to job or career.

Table 4.14 indicates the Statistics Canada 1971 occupational categories by enrollment and gender for the occupational expectations of our Phase IV subjects (as reported in the spring of 1973). There are few surprises here. Men who have been through a CAAT originally expected many different occupations, especially in "occupations in natural sciences, engineering, and mathematics," and in the blue-collar category "product fabricating, assembling, and repairing occupations." Men who have been to university most frequently also expected occupations in "natural sciences, engineering, and mathematics," and to a lesser extent "teaching and related occupations"; they rarely expected future employment in blue-collar work. Men who went to both university and community college are similar to university-only men, except that in high school they most frequently had no expectation (they did not state the occupation they would most likely have).

In general, women were much less diverse in occupational expectations than men. CAAT-only women most frequently expected occupations in "occupations in medicine and health" and "clerical and related occupations." The university-only women most frequently expected employment in "teaching and related occupations" and "occupations in medicine and health." Women who had both university and CAAT were similar in original occupational expectations to university-only women. We shall explore later the actual first jobs and careers of our post-secondary students.

COURSE LENGTH, DEGREES, MAJORS, AND DEGREE COMPLETION

Having examined the educational attainment of our former Grade 12 students in a previous chapter, we can now inquire about the kinds of programs taken and the degrees received. In item B.2 of the questionnaire, we asked respondents who had attended community college to state their most recent program of study, and, in item B.4, the length of their program had they been full-time students; items B.5 and B.7 repeated these questions for those who had attended university.

Course Length and Degrees Received

At both CAATs and universities, men were found in the longer programs somewhat more often than women. For individuals reporting a community college experience, 2 in 10 women indicated that their last program was a one-year course, and almost 8 in 10 indicated that it was a two- or three-year course; 1 in 10 men reported enrollment in a one-year course, and more than 8 in 10 indicated a two- or three-year course. (In general, colleges offer two- and three-year diplomas and one-year certificates.) Women who attended university selected three-year programs in 4 in 10 cases, and four-year courses in 5 in 10 cases; in contrast, only 3 in 10 men were in three-year courses, and 6 in 10 were in four-year programs. These data show that, for university students reporting their last field of study, honors courses were more popular than the ordinary B.A. (In general, universities offer three-year bachelor degrees and four-year honors degrees at the undergraduate level.)

When degrees received are examined, as shown in Table 4.15, it is evident that, while four-year courses might be preferred, somewhat more than half of all our university graduates obtained a three-year bachelor degree, with gender differences being slight. Four in 10 university graduates obtained an honors degree. This is a significantly large proportion and may reflect a desire to move as close to "professional" qualifications as possible without going on to advanced degrees. (Generally speaking, the honors degree is required for admittance into professional schools.) Of all university graduates, only 4.6% also obtained a CAAT diploma or certificate. Of the 7.2% of university graduates who have both a bachelors or honors degree and bachelor of education degree, most are women. For CAAT graduates almost everyone receives the same kind of diploma or certificate; a small proportion of former CAAT students indicated receiving a graduate diploma or certificate, and fewer still received multiple CAAT diplomas and/or certificates.

Majors and Programs

Individuals who attended a university were asked to indicate their most recent undergraduate major or area of specialization and others, if they had more than one major field. In coding this item (item B.6), we employed the categories of area of study used in the 1975 national survey of post-secondary students undertaken by Statistics Canada for the Department of the Secretary of State.[2] Only one-fifth of university graduates recorded a second major, and this proportion was even less for students with university experience but no degree.

Table 4.16 gives a detailed breakdown of the most recent majors of former university students, classified into nine categories. Caution is urged in interpreting this table, since frequencies become very small for many majors; also, the data in this table are based on the first reported major, the assumption being that the second reported field has minor significance. In order of frequency, the most popular majors are: social sciences; business, economics and commerce; agricultural and biological sciences; and arts, fine arts, humanities, and the performing arts. Certain majors support stereotypes of what men and women prefer. Thus, men were found predominantly in agriculture, chemistry, geology, physics, engineering, commerce (engineering and commerce being the most popular majors), economics, and geography. Women were found mainly in household sciences, nursing, fine arts, applied arts, performing arts, English, French, education, physical education, psychology, and sociology (these last two majors being the most popular). As Table 4.16 shows, women, much more frequently than men, listed two majors. This is due to the greater concentration of women in the social sciences, where majors with minors are most common.

Individuals who attended a community college were asked to indicate their most recent program of study. The 1979-80 publication Horizons, prepared by the Ontario Ministry of Colleges and Universities, lists 236 different CAAT programs offered in the province (other than short courses). While we did not anticipate a significant enrollment in most of these, we did expect that the list of programs taken would be long. We therefore decided to use a thirteen-fold classification of community college programs, as employed in the 1975 national survey of post-secondary students. Table 4.17 uses this classification to indicate programs in which our respondents were most recently enrolled.

As with university majors, certain majors strongly support stereotypes of male/female preferences. In order of frequency, the programs more popular with men were engineering and related technologies, business management and commerce, and electronics and electrical technologies. For women, the most popular programs were nursing, secretarial arts and science, community services, teaching and social welfare, and medical and dental technologies.

Grades and Degree Completion

In Phase IV the completion of degrees and certificates is quite high. Of those who were enrolled in universities, 8 in 10 completed a degree; of students enrolled in CAATs, or who had both CAAT and university experience, the completion rate was 7 in 10 (in the case of the latter group, referring to at least one degree in either institution). Seven in 10 men and 8 in 10 women completed degrees.

We asked respondents who had attended a post-secondary institution to indicate their approximate cumulative grade point average (GPA) at their last such institution (Table 4.18). Whether university or CAAT, women on the average did better than men (fewer Cs, or Ds, or Fs). Universities appeared tougher than CAATs, giving out fewer As and more Bs. However, grades did not vary significantly by either socioeconomic origin or urban/rural origin. That is to say, once in a post-secondary institution, an individual of low SES background or rural origin was not disadvantaged with respect to marks, and an individual from a high SES group or high stratum was not especially advantaged. Grades in high school, though, remain moderately related to grades in post-secondary institutions (Table 4.19).

Post-secondary grades are only weakly related to high school program. We have already noted that CAAT enrollees were more frequently drawn from the commercial and technical/vocational courses than university students. Of all CAAT enrollees, 6 in 10 had received an average Grade 11 mark of less than 70%, whereas of all university enrollees, 70% had received an average Grade 11 mark of B or better (see Part B of Table 4.5). However, as demonstrated in Table 4.20, 62.6% of students from the academic program with high school marks below 70% earned Bs and As in post-secondary institutions. The same is true for 60.0% of low-mark students from the commercial and technical/vocational courses. About 15% of high school high-mark (70% and above) students from the academic program dropped to C, D, or F cumulative averages, in post-secondary institutions, though almost one-third of the high-mark nonacademic students dropped to C or lower. Thus, while high school grades, irrespective of program, predict post-secondary performance to some extent, there is general improvement in performance at the post-secondary level when the cumulative GPA is compared to reported Grade 11 marks. There is, however, some indication that high-mark commercial and technical/vocational students often have difficulty in maintaining high marks in universities and CAATs.

Finally, degree completion is related to grades earned in high school and at the post-secondary level, the latter relationship being stronger. As Table 4.21 shows, students who earned Cs or lower marks in post-secondary institutions had higher rates of failing to complete a degree than students earning better marks.

FINANCING POST-SECONDARY EDUCATION

Obtaining a post-secondary education entails costs including tuition fees, books, and transportation, and sometimes room and board; thus, access to post-secondary education may be somewhat restricted to persons with more plentiful financial resources. Because of its importance as a public issue, questions on financing post-secondary education were used in each of the first three phases of the "Critical Juncture" study. In the Phase IV follow-up, we asked for a retrospective assessment of the role of different sources of financing the total costs of attending university or community college; we examined financing in terms of its relationship to gender, SES, and rural/urban origin. Table 4.22 shows the frequencies of selection of the first and second most important sources of financial support for all enrollment groups. As indicated by this table, the roles of university or college scholarships, employer contributions, personal loans, and spouse's earnings are small; therefore, in the discussion to follow we shall concentrate on the remaining five major sources of financing.

The main source of financial support for all post-secondary students is summer earnings, reported by one-third of our sample as being most important. Parental support was the most important source indicated by one-quarter of the students, followed by 15% relying on the Ontario Student Assistance Program (OSAP) or on Canada Student Loans (CSL). One in 10 respondents indicated that employment earnings while studying were most important. Another 1 in 10 specified personal savings. Financial sources that were second in importance follow the order of significance of the first most important, except that OSAP/CSL support was less frequently a second important source.

Given that respondents were asked to indicate both first and second most important sources of financial support, patterns or combinations of support can be determined, as shown in Table 4.23. This table reveals that those dependent on OSAP/CSL were next most dependent on summer earnings (half of the cases); those relying on summer earnings were next most dependent on parental support (more than one-third of the cases) and employment while studying (more than one-quarter of the cases); those dependent on personal savings were next most dependent on parental support (more than one-third); and those relying on parental support were next most dependent on summer earnings (almost 6 in 10) and personal savings (almost 2 in 10).

Socioeconomic status bears a relationship to the importance of different sources in financing post-secondary education. All SES groups indicated summer earnings as the most important financial source (Table 4.24). For the two lowest SES groups, the second most important financial source was OSAP/CSL, while parental support was third in importance. The importance of OSAP/CSL for the two low SES groups is underscored by the fact that from one-fifth to one-quarter relied on OSAP/CSL as their most important source of funding, whereas only 10% or fewer of the two higher SES groups did so. Parental support was the second most important source of financial support for the two higher SES groups.

There are also differences in reliance on financial sources by SES, depending on whether one is enrolled in a CAAT or university (as shown in Table 4.25). Low SES CAAT students drew less frequently on OSAP/CSL than did low SES university students, and much more frequently on parental support and personal savings as the first most important financial source. In contrast, high SES CAAT students drew more frequently on parental support and personal savings than did high SES university students, whose main source of support was summer earnings. For the highest SES group, parental support was the main most important financial source for almost half of the former CAAT students and one-third of the former university students.

Focusing on the urban/rural difference, we found that, as first most important financial resource, 4 in 10 of the "big city" students depended on summer earnings, whereas 3 in 10 depended on summer earnings in "towns and rural areas." However, about one-quarter of the students in the latter stratum depended on OSAP/CSL, whereas the proportion for "big city" students was less than 1 in 10 (Table 4.24). The urban/rural difference on reliance on summer earnings suggests that well-paying summer jobs in rural areas may be scarcer than elsewhere; greater reliance on OSAP/CSL is probably due to the larger lower-status group in this stratum, compared with the other strata.

The gender difference is significant (Table 4.24). For 4 in 10 men, the first most important financial resource was summer earnings, followed by parental support (16.5%) and OSAP/CSL (12.7%); whereas for one-third of women, parental support was most important, followed by summer earnings (28.6%) and OSAP/CSL (16.0%). The much greater dependence of women on parental support suggests a traditional family support so that daughters do not need to work and/or a scarcity of good paying summer jobs for women.

One finding stands out with respect to the most important source of financing post-secondary education. The retrospective evaluation by our sample of former post-secondary students indicates that summer earnings are crucial to many as their main source of financing education; this is especially true for university students, regardless of SES level (4 in 10 of the cases). We suspect that the less frequent reliance of CAAT students on summer earnings (2 in 10 of the cases) is due to the cost difference between a university and a community college education, the latter generally entailing lower fees and being of shorter duration. The role of SES is indicated, however, by the greater reliance of low SES students on OSAP/CSL and the greater reliance of high SES students on parental support.

One final comment on summer earnings as a source of financial support for post-secondary education should be made. In Phase IV we did not obtain information on the nonfinancial sources of support for postsecondary education; in particular, the subsidy often provided by parents who let their sons and daughters live at home at little or no cost while attending college or university. We suspect that summer earnings appear so prominently in our findings in part because many young people can rely on reducing their educational costs by living at home. A full picture of how young people meet the costs of postsecondary education requires a fuller investigation than we have been able to carry out. Still, our findings provide useful information on financing in terms of the various subgroups we have studied.

REASONS FOR CHOOSING MAJOR OR AREA OF SPECIALIZATION

On what basis do young people choose majors and programs at universities or community colleges? Is it on the basis of prodding by parents, interest in the subjects, career prospects, or some combination of reasons such as these? We asked our respondents to assess retrospectively the importance of ten factors in choosing their most recent programs of study (items B.12A to B.12J), and then to select the one most important factor for them (item B.13). The responses were cross-tabulated with the ten main categories of university majors and with the thirteen groups of CAAT programs.

Overall, there is a striking similarity between university and CAAT students in the ways they evaluate the ten reasons (Table 4.26). In general, recommendations of parents or relatives, high school teachers or guidance counsellors, friends, and advice of employers proved of little importance for all students, irrespective of major or program.

Likewise, the fact that the program selected was "less difficult than others I was interested in" and the fact that "course in high school fitted in well with program or major area chosen" were of little importance in selecting a major. In contrast, 9 in 10 students stated that interest in the area or program was very important or important in selecting a major, and career advancement prospects were important for 5 to 6 in 10 students. While parental recommendations and courses in high school were not important reasons for selecting a major for most students, it should be noted that these factors were important for about one-quarter of students in CAATs and universities.

Three of the reasons for selecting a major deserve separate consideration, namely "good employment prospects," "high income prospects," and "career advancement prospects." University and CAAT students differed most with respect to these reasons. Just fewer than half of the university students felt that good employment prospects were very important or important for them in choosing a major, and one-quarter stated that such prospects were not very important or not at all important. In contrast, almost 70% of CAAT students indicated that good employment prospects were very important or important for them. Here is some indication of the different roles of university and CAAT educations: students attending CAATs perceived their course selection as being strongly related to future employment, while many university students were aware that their majors are part of a general education. Still, that almost half of university enrollees were concerned about employment prospects should not be forgotten, and may reflect not only a general concern on their part with linking their education to work, but also the reality that at university there are many preprofessional

183

programs leading into specific careers (e.g., majors in pre-law, economics, commerce, engineering, chemistry, and education). Four in 10 CAAT students and 3 in 10 university students stated that high income prospects were very important or important as a selection factor. Thus, about one-third of the students in both types of institutions felt that their courses would have a significant economic payoff. However, there were also 4 in 10 university students and almost 3 in 10 CAAT students who said that high income prospects were not very important or not at all important in choosing their major. One might speculate that these students were less concerned about post-secondary education giving them a great deal of opportunity to earn high incomes, or had opted for careers which they knew did not have high financial rewards.

Finally, while majorities of CAAT and university students stated that career advancement prospects were very important or important in selecting a major, one-quarter of the university students (and only 16.4% of CAAT students) held that such advancement prospects were not very important or not at all important.

We turn now to differences in evaluating reasons for selecting programs between different majors. The eight university majors will be considered first, as shown in Table 4.27. In this analysis we employ mean scores based on giving a "1" to the response "very important" through to a "5" for the response "not at all important." Thus, the *lower* the mean score the *more important* that relevant factor is in selecting a program of study. We employed an analysis of variance of these means to determine whether university majors differed with respect to factors considered important or unimportant. Statistically significant group differences only occurred for the following reasons:

advice of employer, the three career factors (good employment, high income, and career advancement prospects), and for the factor "courses in high school fitted in well with program or major area chosen."

Good employment prospects were considered very important or important in selecting a major for only 3 in 10 students in the following majors: agricultural and biological sciences; arts, humanities, and fine arts; education, physical education, law, and social work; and the social sciences. From 4 to 8 in 10 students in the physical sciences, the applied sciences, and in business, economics, and commerce regarded this factor similarly. This response pattern holds for career advancement prospects, the difference regarding importance being 4 in 10 for the first group of majors, and 5 to 8 in 10 for the second group. With respect to high income prospects, the former group is definitely less concerned with income as a selection factor, since majorities reported this factor as not very important or not at all important; by contrast, the latter group seems to be attracted by the income potential of their majors, since from 4 to 6 in 10 indicated high income prospects as very important or important reasons for selecting their areas of specialization.

Finally, courses in high school that fitted in well with program are important in the selection of major for the natural and physical science groups. Three to 5 in 10 respondents in these majors believed that high school courses were an important reason for selection, compared with 1 to 3 in 10 respondents making this evaluation in the other groups. Though advice from employers is generally not important in selecting a major, there is more reliance on such advice reported by health profession majors and somewhat less reliance reported by arts, humanities, and fine arts, majors and physical science majors.

Though we originally began with twelve categories of CAAT programs (and a residual category), because of small frequencies we have retained for analysis only the following groups: secretarial arts and science; business management and commerce; fine, applied and performing arts; community service, teaching and social welfare; nursing; and primary industries. We have added communications to the applied arts category, combined medical and dental technologies with nursing, and have included electronics and electrical technologies, and engineering and related technologies with primary industries. This gives six program categories for analysis with respect to differences in evaluating reasons for program selection for CAAT students (Table 4.28).

Program differences in evaluation prove statistically significant (using mean scores) for only four factors, these being recommendation of parents or relatives, interest in program, good employment prospects, and high income prospects. The nursing, medical, and dental technology students are most influenced by parents and relatives in selecting their programs, with fine, applied, and performing arts and communications students indicating the least influences from these sources. Nurses, medical and dental technicians, students in fine, applied, and performing arts, and communications stand out as placing most stress on interest in program as an important factor. Students in secretarial arts and science place least stress on interest, and are the only group with a sizable minority (21.1%) indicating interest was only somewhat important, not very important, or not at all important. One might speculate that a number of women in this program category (96% of students in this category are women) selected this field, not because they were especially attracted to secretarial work, but because they were resigned to this occupation given its ease of entrance. (Skill requirements are modest; it is "women's work," given the structure of the lower white-collar job market, and there is strong employer demand for trained secretaries.)

Similar patterns of evaluation by program are shown for CAAT students with respect to employment and income prospects. Fine, applied, and performing arts, and communications students, and community service, teaching, and social welfare students placed least stress on good employment and high income prospects as selection factors, compared to students in other programs. In fact, at least 50% of students in these programs reported that high income prospects were not very important or not at all important in selecting their programs. There are programs at CAATs, then, that are selected largely out of interest and, though skill-development oriented, may not feed into sectors of the labor market where there is high demand or high income prospects. It should be noted that 51.3% of secretarial arts and science students--and, for that matter, 42.7% of primary industries, electronics, electrical, and engineering technologies students--indicated that high income prospects were very important or important in selection of their program.

When asked to choose the one factor which was most important in choosing their major area of study, university students overwhelmingly retrospectively picked interest in the area (72.7%), with good employment prospects cited next most frequently (9.0%), followed by career advancement prospects (5.0%) (N = 373). The same hierarchy of

167

factors holds for CAAT students (respectively, 64.8%, 13.5%, and 7.2%) (N = 230).

GENERAL SATISFACTION WITH THE POST-SECONDARY EXPERIENCE

We asked respondents with post-secondary educational experience to evaluate this experience in very general terms; that is, in terms of the degree to which they were satisfied, overall, with their formal education (item B.27). Of the 943 individuals responding to this item, 34.7% indicated "very satisfied," 44.8% were "somewhat satisfied," 8.1% were "indifferent," 9.5% marked "somewhat dissatisfied," and only 4.0% recorded a "very dissatisfied." Thus, on the whole, when not asked to evaluate their education in relation to some specific referrent, such as preparation for job, the educational experience generates an overwhelmingly positive response. Interestingly enough, there were no statistically significant differences in satisfaction by type of educational enrollment (whether a university or CAAT enrollment), or by SES, or by urban/rural origins, or by gender. Though there is a public impression that university students are increasingly dissatisfied with their education because it does not lead to a specific job (as does a CAAT education), our data suggests that this is not the case and that, rather, university and CAAT enrollees have similar patterns of satisfaction with respect to their post-secondary experience.

FOOTNOTES

1. See the note to Table 4.1 for description of the relationship of enrollment categories to the educational attainment categories of Table 1.2.

2. Educational Support Branch, Department of the Secretary of State. Some Characteristics of Post-Secondary Students in Canada. Cat. No. S2-51/1976. Ottawa: Ministry of Supply and Services Canada, 1976.

TABLE 4.1: ENROLLMENT IN POST-SECONDARY INSTITUTIONS BY SELECTED SOCIAL BACKGROUND FACTORS

Enrollment	Sex Men (%)	Women (%)	SES Low (%)	2 (%)	3 (%)	High (%)	Stratum Urban (%)	2 (%)	3 (%)	Rural (%)	Total (%)
University enrollment only	57.1	46.3	39.8	41.9	47.0	68.1	60.2	54.7	54.0	37.7	51.4
CAAT enrollment only	30.7	39.2	49.1	45.6	36.1	19.5	24.6	29.9	33.4	51.8	35.2
Both university and CAAT	12.1	14.5	11.1	12.4	16.9	12.4	15.2	15.5	12.6	10.5	13.4
TOTAL (N)	460	512	184	198	206	338	250	222	243	257	972
Significance (p)											

Note: In terms of Table 1.2, univeristy enrollment only comprises the categories "presently enrolled in graduate or professional school", "graduated university", and "attended university but did not graduate"; CAAT enrollment only includes "graduated from CAAT", and "attended CAAT but did not graduate", both university and CAAT enrollment includes all other categories except the last, which is "high school only" or "no post-secondary experience".

TABLE 4.2: ENROLLMENT IN POST-SECONDARY INSTITUTIONS, WITH HIGH SCHOOL ONLY INCLUDED, BY SELECTED SOCIAL BACKGROUND FACTORS

A. EFFECT OF SOCIAL BACKGROUND FACTORS

	Sex		SES				Stratum				
Enrollment	Men (%)	Women (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)	Total (%)
University enrollment only	36.1	29.8	19.3	23.7	29.3	59.4	44.3	36.4	36.5	19.8	22.5
CAAT enrollment only	19.4	25.2	23.8	25.8	22.4	17.0	18.1	19.9	22.6	27.2	32.8
Both university and CAAT	7.7	9.3	5.4	7.0	10.5	10.8	11.2	10.3	8.5	5.5	8.5
High school only	36.8	35.6	51.6	43.5	37.8	12.7	26.4	33.3	32.4	47.6	36.2
TOTAL (N)	727	795	381	350	332	388	340	333	359	490	1,522
Significance (p)											

B. RECRUITMENT INTO ENROLLMENTS BASED ON SOCIAL BACKGROUND

	Sex			SES					Stratum				
Enrollment	Men (%)	Women (%)	Total (N)	Low (%)	2 (%)	3 (%)	High (%)	Total (N)	Urban (%)	2 (%)	3 (%)	Rural (%)	Total (N)
University enrollment only	52.5	47.5	500	15.2	17.2	20.1	47.6	483	30.1	24.3	26.2	19.4	500
CAAT enrollment only	41.3	58.7	342	28.2	28.1	23.2	20.6	321	18.0	19.4	23.7	38.9	342
Both university and CAAT	42.9	57.1	130	16.8	20.1	28.6	34.5	122	29.3	26.3	23.5	20.8	130
High school only	48.6	51.4	550	37.5	29.1	24.0	9.4	524	16.3	20.1	21.2	42.3	550

TABLE 4.3: RECRUITMENT INTO POST-SECONDARY EDUCATIONAL ATTAINMENTS FROM GENDER BACKGROUND, SOCIOECONOMIC ORIGINS, AND STRATA

Educational Achievement in 1979	Sex			SES					Stratum				
	Men (%)	Women (%)	Total (N)	Low (%)	2 (%)	3 (%)	High (%)	Total (N)	Urban (%)	2 (%)	3 (%)	Rural (%)	Total (N)
Presently enrolled graduate or professional school	54.0	46.0	98	14.7	9.0	17.4	58.9	96	24.7	28.8	30.4	16.7	98
Graduated university	50.1	49.9	310	14.3	19.8	19.3	46.6	305	30.8	23.8	24.5	20.9	310
Attended university but did not graduate	59.2	40.8	91	18.9	16.7	26.2	38.2	83	34.5	20.8	27.7	17.0	91
Graduated from CAAT	36.2	63.8	251	27.5	30.2	21.6	20.7	234	16.4	19.0	24.1	40.4	251
Attended CAAT but did not graduate	55.3	44.7	91	30.0	22.3	27.6	20.1	87	22.2	20.3	22.6	34.9	91
University graduate and some CAAT experience	57.0	43.0	21	6.1	21.1	26.1	46.7	19	33.2	19.7	36.9	10.2	21
University graduate and graduated from CAAT	22.2	77.8	30	15.2	26.8	25.5	32.5	26	32.6	15.9	30.1	21.4	30
Graduated from CAAT and some university experience	44.3	55.7	38	22.5	17.1	43.6	16.8	38	26.1	36.0	9.2	28.8	38
Some university and some CAAT experience	49.2	50.8	41	17.2	18.3	17.0	47.5	39	27.9	28.3	25.4	18.4	41
No post-secondary	48.6	51.4	550	37.5	29.1	24.0	9.4	524	16.3	20.1	21.2	42.3	550

TABLE 4.4: POST-SECONDARY EDUCATIONAL ATTAINMENT DESTINATIONS FROM GENDER BACKGROUND, SOCIOECONOMIC ORIGINS, AND STRATA

Educational Achievement in 1979	Sex Men (%)	Women (%)	SES Low (%)	2 (%)	3 (%)	High (%)	Stratum Urban (%)	2 (%)	3 (%)	Rural (%)
Presently enrolled in graduate or professional school	7.3	5.7	3.7	2.5	5.0	14.6	7.0	8.5	8.3	3.3
Graduated university	21.4	19.5	11.5	17.3	17.7	36.6	28.1	22.2	21.1	13.3
Attended university but did not graduate	7.4	4.7	4.1	4.0	6.5	8.1	9.3	5.7	7.0	3.2
Gratuated from CAAT	12.5	20.1	16.9	20.2	15.2	12.5	12.1	14.4	16.8	20.7
Attended CAAT but did not graduate	6.9	5.1	6.8	5.5	7.2	4.5	6.0	5.6	5.7	6.5
University graduate and some CAAT experience	1.7	1.1	0.3	1.1	1.5	2.2	2.1	1.3	2.2	0.4
University graduate and graduated from CAAT	0.9	2.9	1.0	2.0	2.0	2.2	2.8	1.4	2.5	1.3
Graduated CAAT and some university experience	2.3	2.7	2.3	1.9	5.0	1.7	2.9	4.2	1.0	2.3
Some university and some CAAT experience	2.8	2.6	1.8	2.0	2.0	4.8	3.4	3.5	2.9	1.5
No post-secondary experience	36.8	35.6	51.6	43.5	37.8	12.7	26.4	33.3	32.4	47.5
TOTAL (N)	727	795	381	350	332	388	340	333	359	490
Significance (p)										

TABLE 4.5: RECRUITMENT INTO POST-SECONDARY ENROLLMENT FROM SELECTED SOCIAL BACKGROUND ORIGINS, PROGRAM IN HIGH SCHOOL, AND LEVEL OF HIGH SCHOOL PERFORMANCE

A. SOCIAL BACKGROUND

Enrollment	Sex Men (%)	Women (%)	Total (N)	SES Low (%)	2 (%)	3 (%)	High (%)	Total (N)	Stratum Urban (%)	2 (%)	3 (%)	Rural (%)	Total (N)
University enrollment only	52.5	47.5	500	15.2	17.2	20.1	47.6	483	30.1	24.3	26.2	19.4	500
CAAT enrollment only	41.3	58.7	342	28.2	28.1	23.2	20.6	321	18.0	19.4	23.7	38.9	342
Both university and CAAT	42.9	57.1	130	16.8	20.1	28.6	34.5	122	29.3	26.3	23.5	20.8	130
High school only	48.6	51.4	550	37.5	29.1	24.0	9.0	524	16.3	20.1	21.2	42.3	550

B. PROGRAM AND GRADES IN HIGH SCHOOL

Enrollment	High School Program Academic (%)	Commercial (%)	Technical/ Vocational (%)	Total (N)	High School Grades B(70%) or Higher (%)	Lower than 70% (%)	Total (N)
University enrollment only	93.2	1.9	4.9	497	69.6	30.4	492
CAAT enrollment only	66.8	13.7	19.5	337	36.2	63.8	336
Both university and CAAT	84.6	8.4	7.0	130	46.7	53.3	129
High school only	44.9	30.7	24.4	542	26.8	73.2	534

TABLE 4.6: ENROLLMENT IN POST-SECONDARY INSTITUTIONS BY PROGRAM IN HIGH SCHOOL AND HIGH SCHOOL GRADES BY GENDER

	High School Program						High School Grades			
	Academic		Commercial		Technical/ Vocational		70% or higher		Lower than 70%	
Enrollment	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
University enrollment only	51.8	38.7	4.8	3.9	10.4	12.0	64.3	42.8	20.3	15.7
CAAT enrollment only	15.2	26.7	26.4	18.4	26.7	65.2	13.7	21.2	22.8	29.9
Both university and CAAT	9.8	11.2	7.8	4.0	3.5	13.7	7.6	10.0	8.0	8.8
High school only	23.2	23.4	61.0	73.8	59.4	9.1	14.4	26.0	49.0	45.6
TOTAL (N)	457	585	42	191	221	11	263	405	449	375
Significance (p)										

Note: Statistical significance is based on the subtables program by gender for men and women separately, and high school grades by gender for men and women separately. Also, all men/women comparisons are statistically significant except for comparisons with respect to the high school commercial program (N.S.), and high school grades lower than 70% (0.07).

TABLE 4.7: RECRUITMENT INTO POST-SECONDARY EDUCATIONAL ATTAINMENT FROM HIGH SCHOOL PROGRAM AND LEVEL OF HIGH SCHOOL PERFORMANCE

Educational Achievement in 1979	High School Program				High School Grades		
	Academic (%)	Commercial (%)	Technical/ Vocational (%)	Total (N)	70% or Higher (%)	Lower than 70% (%)	Total (N)
Presently enrolled in graduate or professional school	96.7	0.8	2.5	98	79.4	20.6	97
Graduated university	93.8	1.7	4.5	308	69.4	30.6	304
Attended university but did not graduate	87.6	3.7	8.7	90	59.4	40.6	91
Graduated from CAAT	67.9	13.1	19.0	247	41.5	58.5	250
Attended CAAT but did not graduate	63.9	15.3	20.8	90	20.8	79.2	86
University graduate and some CAAT experience	91.6	4.4	4.0	21	58.5	41.5	21
University graduate and graduated from CAAT	91.6	8.4	0.0	30	59.9	40.1	29
Graduated CAAT and some university experience	82.9	11.1	6.0	38	37.4	62.6	38
Some university and some CAAT experience	77.6	7.8	14.6	41	40.1	59.9	41
No post-secondary experience	44.9	30.7	24.4	542	26.8	73.2	534

TABLE 4.8: POST-SECONDARY EDUCATIONAL ATTAINMENT DESTINATIONS FROM HIGH SCHOOL PROGRAM AND LEVEL OF HIGH SCHOOL PERFORMANCE

Educational Achievement in 1979	High School Program Academic (%)	Commercial (%)	Technical/ Vocational (%)	High School Grades 70% or Higher (%)	Lower than 70% (%)
Presently enrolled in graduate or professional school	9.1	0.3	1.1	11.5	2.4
Graduated university	27.8	2.3	6.0	31.6	11.3
Attended university but did not graduate	7.6	1.4	3.4	8.1	4.5
Graduated from CAAT	16.1	13.9	20.3	15.5	17.7
Attended CAAT but did not graduate	5.5	5.9	8.1	2.7	8.3
University graduate and some CAAT experience	1.9	0.4	0.4	1.9	1.1
University graduate and graduated from CAAT	2.6	1.1	0.0	2.6	1.4
Graduated CAAT and some university experience	3.1	1.8	1.0	2.2	2.9
Some university and some CAAT experience	3.0	1.4	2.6	2.5	3.0
No post-secondary experience	23.3	71.4	57.1	21.5	47.4
TOTAL (N)	1042	233	231	668	824
Significance (p)					

TABLE 4.9: LEFT HOME TO ATTEND POST-SECONDARY EDUCATIONAL INSTITUTION BY STRATUM

	Stratum and Undergraduate Institution most Recently Attended							
	Big City		Larger Cities		Smaller Cities		Towns and Rural Areas	
	Univ. (%)	CAAT (%)	Univ. (%)	CAAT (%)	Univ. (%)	CAAT (%)	Univ. (%)	CAAT (%)
Yes, left home town or city	35.5	13.6	29.4	26.6	65.8	43.3	90.7	67.1
No	64.5	86.4	70.6	73.4	34.2	56.7	9.3	32.9
TOTAL (N)	169	79	134	84	140	100	105	146
Significance (p)								

Note: Statistical significance is based on the subtables stratum by university and stratum by CAAT; university and CAAT proportions within stratum are not being compared.

TABLE 4.10: SOCIOECONOMIC STATUS ORIGINS BY STRATUM

	Stratum			
SES	Urban (%)	2 (%)	3 (%)	Rural (%)
Lowest	15.7	18.5	24.0	40.2
Medium-low	18.4	26.2	25.6	25.5
Medium-high	25.6	24.8	23.3	19.5
Highest	40.3	30.4	27.1	14.8
TOTAL (N)	316	318	347	470
Significance (p)				

TABLE 4.11: HIGH SCHOOL PROGRAM BY STRATUM BY GENDER

	Stratum							
	Big City		Larger Cities		Smaller Cities		Towns and Rural Areas	
High School Program	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
Academic	88.6	80.5	68.5	75.4	62.1	79.0	46.1	65.3
Commercial	1.4	18.2	4.3	23.1	8.3	18.7	7.9	34.1
Technical/vocational	10.1	1.3	27.2	1.4	29.6	2.3	45.9	0.6
TOTAL (N)	149	189	153	177	171	183	247	237
Significance (p)								

Note: Statistical significance is based on the subtables stratum by gender for men and women separately. Also, all men/women comparisons are statistically significant.

TABLE 4.12: HIGH SCHOOL PROGRAM BY STRATUM BY GENDER CONTROLLING FOR SES

	Stratum							
	Big City		Larger and Smaller Cities		Towns and Rural Areas		High School Program Total	
High School Program	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
Low and Medium-Low Socioeconomic Status								
Academic	82.0	56.4	53.0	65.1	37.9	55.3	49.9	61.5
Commercial	2.5	29.6	7.5	31.9	9.5	44.3	7.8	36.3
Technical/vocational	15.5	4.0	39.5	3.0	52.6	0.4	42.4	2.2
TOTAL (N)	45	63	144	166	159	145	348	373
Significance (p)			.05 (women)					
High and Medium-High Socioeconomic Status								
Academic	91.4	87.1	76.9	89.7	65.9	82.0	78.4	87.2
Commercial	0.0	12.9	4.6	9.9	4.7	17.2	3.4	12.4
Technical/vocational	8.6	0.0	18.4	0.4	29.4	0.8	18.3	0.4
TOTAL (N)	92	113	169	177	77	83	338	374
Significance (p)			N.S. (women)					

Note: Statistical significance is based on subtables stratum by SES for men and women separately. Also, all men/women comparisons in both parts of this table are statistically significant.

TABLE 4.13: ENROLLMENT IN POST-SECONDARY INSTITUTIONS BY STRATUM BY GENDER CONTROLLING FOR SES

A. LOW, MEDIUM-LOW AND MEDIUM-HIGH SOCIOECONOMIC STATUS

	Stratum									
	Big City		Larger Cities		Smaller Cities		Towns and Rural Areas		Enrollment Total	
Enrollment	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
University enrollment only	38.4	28.5	34.5	21.9	32.1	23.9	14.5	15.3	26.5	21.4
CAAT enrollment only	27.7	14.8	21.4	22.2	16.0	32.3	25.1	28.4	22.6	25.3
Both university and CAAT	11.0	9.3	8.7	8.0	7.1	9.7	5.8	4.8	7.5	7.5
High school only	22.9	47.4	35.4	47.9	44.8	34.1	54.7	51.4	43.4	45.8
TOTAL (N)	81	108	103	118	123	130	207	193	514	548
Significance (p)										

B. HIGH SOCIOECONOMIC STATUS

	Stratum									
	Big City		Larger Cities		Smaller Cities		Towns and Rural Areas		Enrollment Total	
Enrollment	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
University enrollment only	74.0	52.2	61.6	59.6	67.1	55.4	54.1	47.9	65.7	54.0
CAAT enrollment only	6.2	25.2	9.5	16.9	9.0	21.5	11.6	35.6	8.7	24.2
Both university and CAAT	6.1	13.6	14.5	16.5	9.7	10.0	8.4	5.7	9.6	12.0
High school only	13.7	9.0	14.4	7.1	14.1	13.1	25.9	10.8	16.1	9.8
TOTAL (N)	58	70	46	51	45	49	31	39	180	208
Significance (p)			N.S. (men)		N.S. (women)					

Note: Statistical significance is based on subtables stratum by SES for men and women separately. Men/women comparisons are not statistically significant except for the Part A. "Big City" and "Smaller Cities" comparisons and for the Part B. "Big City" and "Towns and Rural Areas" (0.09) comparisons.

TABLE 4.14: ENROLLMENT IN POST-SECONDARY INSTITUTIONS BY 1973 OCCUPATIONAL EXPECTATIONS BY GENDER

	Enrollment			
Statistics Canada Occupational Category	University Enrollment Only (%)	CAAT Enrollment Only (%)	University and CAAT Enrollment (%)	High School Only (%)
Men				
Managerial administrative and related	7.7	5.7	3.8	2.8
Natural sciences, engineering and mathematics	23.0	20.1	10.1	6.0
Social sciences and related fields	9.9	1.8	1.2	0.6
Religion	0.0	0.0	0.0	0.2
Teaching and related	12.7	5.5	15.5	2.3
Medicine and health	7.1	1.9	5.6	1.6
Artistic, literary recreational and related	5.5	6.1	5.7	3.1
Clerical and related	3.2	2.4	4.8	2.7
Sales	2.3	3.4	4.9	4.3
Service	2.8	4.1	3.6	4.9
Farming, horticultural and animal husbandry	1.9	3.6	4.2	4.2
Forestry and logging	1.2	0.8	0.0	0.0
Mining and quarrying including oil and gas field	0.0	0.0	0.0	0.3
Processing	0.0	0.9	0.0	0.8
Machining and related	0.5	1.1	0.0	3.3
Product fabricating, assembling and repairing	0.3	11.9	0.0	11.5
Construction trades	1.1	4.5	0.0	13.8
Transport equipment operating	1.0	1.9	5.2	5.5
Other crafts and equipment operating	0.0	0.6	0.0	0.3
Occ. not elsewhere classified	0.8	3.5	6.8	[illegible]
Occ. not stated	19.1	20.2	27.8	23.0
TOTAL (N)	263	141	56	267
Significance (p)				

TABLE 4.14: (cont'd)

Statistics Canada Occupational Category	University Enrollment Only (%)	CAAT Enrollment Only (%)	University and CAAT Enrollment (%)	High School Only (%)
	Enrollment			
Women				
Managerial administrative and related	3.5	2.3	1.4	0.9
Natural sciences, engineering and mathematics	6.4	0.8	1.3	0.3
Social sciences and related fields	7.2	7.2	11.1	2.2
Religion	1.3	0.0	0.0	0.3
Teaching and related	29.1	7.8	21.4	4.9
Medicine and health	16.5	28.7	9.8	8.8
Artistic, literary recreational and related	7.4	6.3	12.0	1.5
Clerical and related	6.1	25.4	16.7	54.2
Sales	2.1	3.5	2.5	4.7
Service	1.9	3.5	6.5	3.4
Farming, horticultural and animal husbandry	0.8	0.0	0.0	0.8
Forestry and logging	0.0	0.4	0.0	0.0
Product fabricating, assembling and repairing	0.0	0.6	0.0	0.7
Occ. not elsewhere classified	3.1	5.4	3.6	6.1
Occ. not stated	14.6	8.2	13.9	11.2
TOTAL (N)	237	201	74	283
Significance (p)				

Note: A fuller description of the Statistics Canada occupational categories is to be found in Appendix B.

TABLE 4.15: DEGREES RECEIVED BY UNIVERSITY AND CAAT GRADUATES

	Gender			
	Men		Women	
Type of Degree	(%)	(%)	(%)	(%)
University Graduates				
Ordinary Bachelor's Degree		52.6		56.9
B.A. and B.Education	0.9		6.5	
B.A. and diploma/certificate	4.8		2.2	
Honours Bacholor's Degree		42.1		41.8
H.B.A. and B. Education	1.8		5.2	
H.B.A. and diploma/certificate	0.4		1.7	
Master's Degree		0.9		0.0
Other		1.3		0.0
Not known		3.1		1.3
TOTAL (N)		228		232
Significance (p)		N.S.		
CAAT Graduates				
Diploma or certificate		96.7		96.9
Diploma/certificate and B.A. and/or H.B.A.	10.0		4.7	
Two or more diploma/certificates	1.7		2.6	
Graduate diploma or certificate		3.4		2.6
Graduate diploma/certificate and diploma/certificate	1.7		1.0	
Not known		0.0		0.5
TOTAL (N)		120		192
Significance (p)		N.S.		

Note: Based on replies to items B.10 and B.11, CAAT graduates include graduates of the Ontario College of Arts, and some graduates of Ryerson Polytechnical Institute.

TABLE 4.16: MOST RECENT MAJORS REPORTED BY MEN AND WOMEN WITH UNIVERSITY EXPERIENCE[a]

Major Field	Men (%)	Women (%)	Total (%)
Agricultural and Biological Sciences	11.4	13.0	1.3
Agriculture	2.3	0.3	1.3
Biochemistry, biophysics	1.3	1.7	1.5
Biological sciences (including biology, botany, zoology)	7.5	8.0	7.8
Household sciences (including home economics, consumer studies)	0.3	2.0	1.2
Veterinary medicine, veterinary science	0.0	1.0	0.5
Health Professions	1.3	3.6	2.5
Dentistry (excluding pre-dentistry)	0.7	0.0	0.3
Medicine (excluding pre-medicine)	0.0	0.3	0.2
Nursing	0.0	2.0	1.0
Pharmacy	0.3	0.3	0.3
Other health professions (including optometry, occupational and physical therapy, public and rehabilitation medicine, audiology)	0.3	1.0	0.7
Arts, Fine Arts, Humanities, Performing Arts	8.2	16.3	12.2
Fine, applied and performing arts	1.3	4.3	2.8
Classics and classical languages	0.0	0.7	0.3
English	3.3	6.0	4.6
French	0.0	3.7	1.8
Other modern languages	0.3	1.0	0.7
Philosophy	1.3	0.3	0.8
Religious studies (including theology)	0.7	0.3	0.5
Other humanities (including library science, journalism, translation, creative writing)	1.3	0.0	0.7
Physical Sciences and Mathematics	10.1	3.6	6.9
Applied mathematics (including actuarial science, computer science)	1.6	1.0	1.3
Mathematics (including mathematical statistics)	3.3	2.0	2.6
Chemistry	1.3	0.3	0.8
Geology and related (including geophysics)	1.6	0.0	0.8
Physics	2.3	0.0	1.2
Other physical sciences (including metallurgy, meteorology, oceanography)	0.0	0.3	0.2
Applied Science	15.1	1.3	8.3
Architecture	1.0	0.0	0.5
Engineering	13.1	0.3	6.8
Other applied sciences (including lansdcape architecture, forestry)	1.0	1.0	1.0
Education, Physical Education, Law, and Social Work	5.6	11.6	8.6
Education (excluding physical, health and recreation education)	1.6	3.3	2.5
Physical, health, and recreation education	3.0	6.0	4.5
Law (excluding pre-law)	0.7	1.0	0.8
Social work	0.3	1.3	0.8

TABLE 4.16 (cont'd)

Major Field	Men (%)	Women (%)	Total (%)
Business, Economics, and Commerce	17.7	8.0	12.8
Commerce, business administration, administrative studies (excluding public and health administration)	12.1	7.3	9.7
Economics (including agricultural economics	5.6	0.7	3.1
Social Science	20.7	30.5	25.6
History	4.9	3.3	4.1
Anthropology	0.3	0.0	0.2
Geography (including physical geography)	6.6	1.7	4.1
Linguistics	0.0	0.3	0.2
Man/environmental studies (e.g. regional and urban planning)	2.3	0.3	1.3
Political science (including public administration and international relations)	3.3	3.3	3.3
Psychology	2.0	13.6	7.8
Sociology (including criminology, demography, folklore)	1.3	7.0	4.1
Other social sciences (including archaeology, area studies, health administration, military studies)	0.0	1.0	0.5
Other Studies	2.9	3.6	3.3
Arts and science general (i.e. no major)	1.6	2.3	2.0
Other university majors	1.3	1.3	1.3
No Answer or Not Known	6.9	8.3	7.6
(Percentage with two or more majors)	(17.0)	(25.9)	(21.5)
TOTAL (N)	305	301	606

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[a] - Includes all educational attainment groups shown in Table 1.2 that refer to a university degree, and includes university no degree, and some university, som CAAT experience.

TABLE 4.17: MOST RECENT PROGRAMS REPORTED BY MEN AND WOMEN WITH COMMUNITY COLLEGE EXPERIENCE

CAAT Program Category	Percentage Enrolled Men	 Women	 Total
University transfer and arts and science	1.1	1.6	1.4
Secretarial arts and science	1.1	18.9	11.5
Business management and commerce[a]	20.5	9.5	14.1
Fine, applied and performing arts[b]	6.8	7.0	6.9
Communications[c]	4.0	1.6	2.6
Community services, teaching and social welfare[d]	5.7	13.6	10.3
Nursing (programs leading to R.N. only)	0.0	22.6	13.1
Data processing[e]	4.5	1.6	2.9
Primary industries[f]	5.1	0.8	2.6
Medical and dental technologies[g]	1.7	8.2	5.5
Electronics and electrical technologies	14.2	0.4	6.2
Engineering and related technologies[h]	21.0	0.4	9.1
Other programs	6.3	7.4	6.9
No answer	8.0	6.2	6.9
TOTAL (N)	176	243	419

[a] - Includes accounting, finance, advertising, marketing and merchandising, hotel management.

[b] - Includes design, graphic arts, photography, music, theater, library technology.

[c] - Includes radio and television arts, journalism.

[d] - Includes child-care, early childhood education, teacher education, correctional services, law enforcement, recreation.

[e] - Includes computer science, programming.

[f] - Includes agriculture, forestry, fisheries, and mining technologies.

[g] - Includes radiology, medical laboratory.

[h] - Includes chemical, civil, mechanical and architectural technologies, drafting, surveying, construction.

TABLE 4.18: POST-SECONDARY GPA[a] AND LAST INSTITUTION ATTENDED BY SEX

	Last Institution Attended					
	University		CAAT		Total	
Reported GPA	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
A	15.3	19.5	25.1	27.4	18.9	23.2
B	51.9	56.2	41.4	54.7	48.0	55.5
C, D, or F	32.8	24.2	33.5	17.9	33.1	21.2
TOTAL (N)	282	262	163	235	445	496
Significance (p)	.02 (men)		.06 (women)			

Note: Statistical significance is based on subtables post-secondary GPA by the last institution for men and women separately. Of the men/women comparisons, the CAAT comparison is statistically significant, and the university comparison is significant at the .07 level.

[a] - GPA refers to grade point average.

TABLE 4.19: HIGH SCHOOL GRADES COMPARED TO POST-SECONDARY GPA[a] BY SEX

	High School Grades			
	70% or higher		Lower than 70%	
Reported GPA	Men (%)	Women (%)	Men (%)	Women (%)
A	21.8	27.7	16.1	17.0
B	55.4	59.6	41.7	49.7
C, D, or F	22.8	12.6	42.2	33.3
TOTAL (N)	221	299	223	198
Significance (p)				

Note: Statistical significance is based on subtables post-secondary GPA by high school grades for men and women separately. Of the men/women comparisons, only the 70% or higher comparison is statistically significant.

[a] - GPA refers to grade point average; high school grades refers to average marks reported for Grade 11.

TABLE 4.20: POST-SECONDARY GPA[a] BY PROGRAM IN HIGH SCHOOL BY HIGH SCHOOL GRADES

	Program in High School	
Reported GPA	Academic (%)	Commercial and Technical/Vocational (%)
High School Grades B or Higher		
A	24.7	29.8
B	60.0	40.2
C, D, or F	15.3	30.0
TOTAL (N)	457	58
Significance (p)		
High School Grades Lower than 70%		
A	14.0	23.2
B	48.6	36.8
C, D, or F	37.4	40.0
TOTAL (N)	318	100
Significance (p)	.04	

[a] - GPA refers to grade point average.

TABLE 4.21: POST SECONDARY DEGREE COMPLETION BY POST-SECONDARY GPA[a] AND HIGH SCHOOL GRADES BY GENDER

	Post-Secondary GPA			High School Grades	
Post-Secondary Degree Completion	A (%)	B (%)	C, D or F (%)	70% or Higher (%)	Lower than 70% (%)
Men					
Completed	81.0	81.3	59.1	81.3	65.5
Did not complete	19.0	18.7	40.9	18.7	34.5
TOTAL (N)	84	214	149	225	229
Significance (p)					
Women					
Completed	90.4	86.4	54.3	84.6	75.0
Did not complete	9.6	13.6	45.7	15.4	25.0
TOTAL (N)	115	280	105	299	204
Significance (p)					

[a] - GPA refers to cumulative grade point average.

TABLE 4.22: FIRST AND SECOND MOST IMPORTANT SOURCES OF FINANCING TOTAL COSTS OF POST-SECONDARY EDUCATION BY ENROLLMENT

	Post-Secondary Enrollment							
	University Enrollment		CAAT Enrollment		Both University and CAAT		Total Enrollments	
Source of Financial Support	First Source (%)	Second Source (%)	First Source (%)	Second Source (%)	First Source (%)	Second Source (%)	First Source (%)	Second Source (%)
University or college fellowship or scholarship	2.4	3.8	0.3	0.9	0.0	1.7	1.3	2.6
Employer contributions	1.5	0.8	6.8	1.4	1.0	1.3	1.2	1.1
OSAP/CSL[a]	13.1	12.2	15.2	9.5	18.0	9.0	14.5	10.9
Loans (other than OSAP/CSL)	1.1	2.1	2.7	2.8	0.6	4.7	1.6	2.7
Summer employment earnings	43.9	28.9	21.2	27.7	33.3	24.4	34.6	27.9
Employment while attending school	6.5	14.6	12.3	17.1	8.3	18.6	8.8	15.9
Spouse's earnings	1.2	0.2	1.6	1.4	0.6	0.0	1.3	0.6
Personal savings	5.2	12.1	13.4	20.2	12.0	14.1	9.0	15.0
Parental financial support	23.9	24.1	28.0	17.2	25.0	24.6	25.5	22.0
Government financial support	0.2	0.5	3.2	1.1	0.0	0.7	1.2	0.7
Other	1.0	0.6	1.2	0.6	1.2	0.9	1.1	0.7
TOTAL (N)	498	461	337	266	128	111	962	838
Significance (p)		0.08						

Note: Statistical significance is based on subtables enrollment by first source and enrollment by second source. First most important source is not being compared to second most important source with respect to statistical significance. For the latter comparison, see Table 4.23.

[a] - OSAP/CAL refers to Ontario Student Assistance Program, and to Canada Student Loans, respectively.

TABLE 4.23: FIRST BY SECOND MOST IMPORTANT SORCES OF FINANCING TOTAL COSTS OF POST-SECONDARY EDUCATION

	Second Most Important Source of Financial Support: Row Percentages						
First Most Important Source of Financial Support	OSAP/CSL (%)	Summer Employment Earnings (%)	Employment While Attending School (%)	Personal Savings (%)	Parental Support (%)	Other (%)	Total (N)
OSAP/CSL[a]	0.0	49.2	12.4	12.5	17.1	8.9	132
Summer employment earnings	16.1	0.0	27.1	13.9	35.8	7.1	309
Employment while attending school	13.3	31.7	0.0	20.0	26.7	8.3	60
Personal savings	14.0	20.3	8.6	0.0	37.2	19.9	65
Parental support	6.6	59.2	9.5	18.5	0.0	6.2	211
Other	17.7	19.2	13.3	24.6	14.7	10.4	62

Note: This table is statistically significant at less than 0.001 using the chi-square test.

[a] - OSAP/CSL refers to Ontario Student Assistance Program and to Canada Student Loans, respectively.

TABLE 4.24: FIRST MOST IMPORTANT SOURCES OF FINANCING COSTS OF POST-SECONDARY EDUCATION BY SELECTED SOCIAL BACKGROUND FACTORS

	Selected Social Background Factors									
	Sex		SES				Stratum			
Source of Financial Support	Men (%)	Women (%)	Low SES (%)	Medium Low SES (%)	Medium High SES (%)	High SES (%)	Big City (%)	Larger Cities (%)	Smaller Cities (%)	Towns and Rural Areas (%)
OSAP/CSL[a]	12.7	16.0	16.0	20.1	10.6	6.4	8.0	9.3	16.1	23.6
Summer employment earnings	41.2	28.6	27.7	31.5	41.5	37.7	40.8	35.4	34.2	28.3
Employment while attending school	10.9	7.0	9.7	9.6	9.7	6.4	8.1	10.7	8.4	8.4
Personal savings	9.2	8.8	7.7	11.5	9.7	8.6	7.0	10.6	9.2	9.2
Parental support	16.5	33.4	17.6	18.0	20.6	36.5	31.2	25.9	25.0	19.4
Other	9.5	6.2	11.2	9.3	7.9	4.4	5.0	8.1	7.0	11.0
TOTAL (N)	459	508	183	197	205	336	249	220	243	255
Significance (p)										

[a] - OSAP/CSL refers to Ontario Student Assistance Program, and to Canada Student Loans, respectively.

TABLE 4.25: FIRST MOST IMPORTANT SOURCES OF FINANCING POST-SECONDARY EDUCATION BY SOCIOECONOMIC STATUS AND ENROLLMENT

Source of Financial Support	Low SES University Enrollment (%)	Low SES CAAT Enrollment (%)	Low SES Both University and CAAT (%)	Medium-Low SES University Enrollment (%)	Medium-Low SES CAAT Enrollment (%)	Medium-Low SES Both University and CAAT (%)	Medium-High SES University Enrollment (%)	Medium-High SES CAAT Enrollment (%)	Medium-High SES Both University and CAAT (%)	High SES University Enrollment (%)	High SES CAAT Enrollment (%)	High SES Both University and CAAT (%)
OSAP/CSL[a]	29.0	24.9	22.5	23.3	15.8	26.3	7.1	9.8	22.3	6.2	5.6	8.6
Summer employment earnings	45.9	12.2	27.8	37.5	26.8	30.0	54.0	22.0	45.8	42.6	27.1	27.9
Employment while attending school	7.2	10.7	15.9	6.6	12.2	5.9	5.4	17.0	6.8	6.6	5.6	7.1
Personal savings	0.0	14.1	8.6	6.4	14.5	16.8	9.6	12.1	5.4	5.0	14.7	18.9
Parental support	10.6	23.2	20.7	17.3	19.0	17.5	14.7	30.0	17.8	34.0	45.7	35.7
Other	7.3	14.9	4.4	8.9	11.3	3.5	9.2	9.2	2.0	5.7	1.4	1.8
TOTAL (N)	73	88	20	83	89	23	97	72	35	228	66	42
Significance (p)					N.S.							

[a] - OSAP/CSL refers to Ontario Student Assistance Program, and to Canada Student Loans, respectively.

TABLE 4.26: EVALUATION OF REASONS MAJOR OR PROGRAM WAS SELECTED BY UNIVERSITY AND CAAT ENROLLEES

Reasons for Choosing Major or Program	Evaluation of Reason Given University Enrollers Very Important or Important (%)	Somewhat Important (%)	Not Very Important or Not At All Important (%)	Total (N)	CAAT Enrollers Very Important or Important (%)	Somewhat Important (%)	Not Very Important or Not At All Important (%)	Total (N)
Recommendation of parents/ relatives	23.8	24.2	52.0	377	25.8	27.8	46.4	233
Recommendation of high school teachers/guidance counsellors	13.9	19.7	66.5	377	12.1	26.6	61.2	232
Recommendation of friends	11.5	26.9	61.6	376	11.4	25.5	63.1	232
Advice of employer	5.4	5.0	89.6	364	10.7	6.6	82.7	226
Interest in area/program	90.3	8.1	1.6	377	91.3	7.4	1.3	233
Good employment prospects	46.8	26.2	26.9	377	69.4	18.2	12.4	234
High income prospects	31.6	25.9	42.6	377	38.3	34.6	27.0	233
Career advancement prospects	52.5	23.4	24.1	376	59.7	23.9	16.4	234
Program less difficult than others I was interested in	2.5	9.6	87.9	374	2.5	8.0	89.5	232
Courses in high school fitted in well with program chosen	26.5	22.3	51.2	376	21.7	21.9	56.4	233

209

TABLE 4.27: MEAN SCORES FOR REASONS MAJOR WAS SELECTED BY MAJOR CATEGORY FOR UNIVERSITY STUDENTS

	Last Reported Field of Study: Mean Scores[b]										Arts vs. Science		
Reasons for Choosing Major	Over-all Mean Score	Agriculture Biological Sciences (1)	Health Professions (2)	Arts, Fine Arts, Humanities (3)	Physical Sciences (4)	Applied Sciences (5)	Education/ Physical Education, Law, Social Work (6)	Business Economics Commerce (7)	Social Sciences (8)	Statistical Significance (p)	Majors 1,3, 6 and 8	Majors 2,4, 5 and 7	Statistical Significance
Recommendation of parents/ relatives	3.[illegible] (1.[illegible])[a]	3.5[illegible] (1.18)	2.88 (1.43)	3.77 (1.19)	3.60 (1.24)	2.95 (1.24)	3.44 (1.22)	3.29 (1.40)	3.68 (1.12)	.04	3.62 (1.18)	3.28 (1.30)	
Recommendation of high school teachers/ guidance counsellors	3.94 (1.19)	3.98 (1.10)	3.66 (1.32)	3.96 (1.06)	4.13 (1.01)	3.96 (1.19)	3.70 (1.35)	4.01 (1.13)	3.91 (1.29)	N.S.	3.96 (1.17)	3.97 (1.13)	N.S.
Recommendation of friends	3.80 (1.07)	3.71 (1.19)	4.04 (0.94)	3.97 (0.99)	3.99 (1.01)	3.83 (1.09)	3.47 (1.03)	3.87 (1.08)	3.78 (0.99)	N.S.	3.77 (1.05)	3.85 (1.04)	N.S.
Advice of employer	4.57 (0.88)	4.53 (0.98)	4.45 (1.24)	4.88 (0.44)	4.69 (0.66)	4.49 (0.85)	4.71 (0.53)	4.59 (0.90)	4.5[illegible] (0.[illegible]7)		4.62 (0.78)	4.57 (0.86)	N.S.
Interest in area/program	1.44 (0.73)	1.40 (0.77)	1.37 (0.47)	1.45 (0.73)	1.47 (0.73)	1.57 (0.59)	1.37 (0.74)	1.60 (0.76)	1.34 (0.63)	N.S.	1.39 (0.69)	1.52 (0.66)	.06
Good employment prospects	2.68 (1.26)	2.94 (1.16)	2.59 (1.31)	3.29 (1.05)	2.65 (1.33)	2.03 (1.10)	2.87 (1.12)	1.79 (1.1[illegible])	3.05 (1.23)		2.95 (1.21)	2.11 (1.21)	
High income prospects	3.15 (1.23)	3.33 (1.13)	3.66 (0.98)	3.85 (0.91)	2.95 (1.29)	2.41 (1.01)	3.47 (1.10)	[illegible].32 (1.21)	4.0[illegible] (1.14)		3.43 (1.16)	2.59 (1.21)	
Career advancement prospects	2.60 (1.22)	2.81 (1.24)	2.41 (1.11)	3.15 (1.07)	2.69 (1.38)	1.97 (0.95)	2.99 (1.18)	1.88 (1.17)	2.77 (1.21)		2.79 (1.22)	2.12 (1.19)	
Program less difficult than others I was interested in	4.53 (0.79)	4.49 (0.83)	5.00 (0.00)	4.42 (0.90)	4.43 (0.87)	4.71 (0.64)	4.77 (0.50)	4.58 (0.75)	4.47 (0.73)	N.S.	4.49 (0.79)	4.61 (0.77)	N.S.
Courses in high school fitted in well with program chosen	3.48 (1.34)	3.27 (1.46)	3.67 (1.28)	3.45 (1.35)	2.75 (1.22)	3.06 (1.39)	3.47 (1.39)	3.99 (1.10)	3.61 (1.22)		3.55 (1.34)	3.39 (1.34)	N.S.
TOTAL (N)	377	51	12	51	33	36	32	45	88		272	143	

Note: This table is based on the institution most recently attended by the respondent. University students include those now in graduate or professional schools, university graduates, and those with university experience only but no degree. The overall means for university students include the categories other majors (eight cases) and major not known or not codable (twenty-two cases). The mean scores were provided by the SPSS Breakdown procedure which gives an analysis of variance with significance being determined by an F-test. The significance level adopted in this table is 0.01. Means are computed by numbering responses from one to five with "1" indicating "very important" and "5" indicating "not at all important". The relevant questionnaire item is B.12.

[a] - Numbers in parantheses are the standard deviations corresponding to the mean scores just above.

[b] - University students were encouraged to indicate more than one major; this analysis is based on the first reported major.

TABLE 4.28: MEAN SCORES FOR REASONS PROGRAM WAS SELECTED BY PROGRAM CATEGORY FOR CAAT STUDENTS

Reasons for Choosing Program	Over-all Mean Score	Last Reported Program of Study: Mean Scores Secretarial Arts and Science	Business Management and Commerce	Fine, Applied and Performing Arts and Communications	Community Service Teaching, Social Welfare	Nursing, Medical and Dental Technology	Primary Industries, Electronics, Electrical, Engineering	Statistical Significance (p)
Recommendation of parents/relatives	3.38 (1.19)[a]	3.33 (1.10)	3.60 (1.18)	3.91 (1.10)	3.50 (1.15)	2.83 (1.20)	3.49 (1.21)	
Recommendation of high school teachers/guidance counsellors	3.80 (1.09)	3.72 (1.12)	3.92 (1.13)	3.75 (1.02)	3.81 (1.14)	3.62 (1.08)	3.85 (1.01)	N.S.
Recommendation of friends	3.81 (1.07)	4.12 (0.81)	4.20 (1.02)	3.76 (1.24)	3.82 (1.04)	3.48 (0.99)	3.83 (1.07)	N.S.
Advice of employer	4.35 (1.17)	4.50 (1.08)	4.43 (1.20)	4.89 (0.32)	4.67 (0.93)	4.10 (1.37)	4.22 (1.18)	.07
Interest in area/program	1.47 (0.74)	1.96 (1.00)	1.39 (0.56)	1.31 (0.59)	1.59 (0.69)	1.18 (0.44)	1.53 (0.83)	
Good employment prospects	2.07 (1.15)	1.59 (0.99)	2.11 (1.24)	3.08 (1.22)	2.58 (1.24)	1.90 (0.93)	1.96 (1.01)	
High income prospects	2.83 (1.20)	2.58 (1.09)	2.71 (1.37)	3.56 (0.79)	3.56 (1.13)	2.52 (1.07)	2.62 (1.14)	
Career advancement prospects	2.33 (1.21)	2.12 (1.14)	2.26 (1.36)	2.72 (1.13)	2.81 (1.26)	2.36 (1.12)	2.03 (1.15)	N.S.
Progress less difficult than others I was interested in	4.58 (0.78)	4.40 (0.79)	4.72 (0.60)	4.86 (0.48)	4.58 (0.77)	4.43 (1.07)	4.78 (0.42)	N.S.
Courses in high school fitted in well with program chosen	3.63 (1.31)	3.22 (1.53)	3.76 (1.33)	3.89 (1.16)	4.18 (0.92)	3.33 (1.29)	3.68 (1.36)	.04
TOTAL (N)	233	35	23	16	30	58	36	

Note: This table is based on institution most recently attended by the respondent. CAAT students include CAAT graduates, and those with CAAT experience only but no diploma. The overall means for CAAT students include the categories other programs (eighteen cases) and program not known or not codable (eighteen cases). The mean scores were provided by the SPSS Breakdown procedure which gives an analysis of variance with significance being determined by an F-test. The significance level adopted for this table is 0.01. Means are computed by numbering responses from one to five with "1" indicating "very important" and "5" indicating "not at all important". The relevant questionnaire item is B.12.

[a] - Numbers in parentheses are the standard deviations corresponding to the mean scores just above.

CHAPTER FIVE

INTERRUPTION OF SCHOOLING AND WITHDRAWAL FROM POST-SECONDARY INSTITUTIONS

Student withdrawal from Canadian post-secondary institutions has emerged, in the seventies, as a subject of concern. During the sixties and early seventies, post-secondary education was in the process of expanding and the issue of withdrawal remained temporarily dormant. Although American researchers have concentrated a good deal of attention on researching and publishing findings related to "withdrawal," "dropping out," or "persisting," little research has been done in Canada on the problem of student withdrawal.[1] In fact, there is no centralized record of the number of students who have withdrawn from Canadian universities.

Student withdrawal is an important issue from the points of view of both students and post-secondary institutions. Institutional administrators may consider withdrawal rates as reflecting the misallocation of educational resources, reflecting ineffective counselling, and as an unrecouped loss with regard to admission costs, refunded tuition, and planning and running programs. From the student's frame of reference, the decision to drop out is usually a painful experience because such a personal setback may result in impeded career development. At a minimum, withdrawal represents lost money and lost time.

An analysis of withdrawal does not totally reflect the phenomenon of educational persistence. In Ontario, Grades 12 and 13 students are at a critical juncture--they must decide whether to continue their education and enroll in university or community college, or to adopt some alternative plan. Of three major paths, students may:

1. directly enter a post-secondary institution after graduating from high school (e.g., after Grade 12 or Grade 13);
2. delay their post-secondary studies for at least a year and then continue on to university or community college; or,
3. adopt an alternative route, including such possibilities as entering the labor market immediately, traveling, getting married, and entering adult training.[2]

The analysis of students who withdraw from post-secondary education will be separated from our treatment of interruption or delay of education. The logic of the analyses, however, is quite similar. We want to know whether withdrawal and interruption are phenomena that may be understood within a social context. For example, we pose the following types of questions: Are there salient differences in socioeconomic backgrounds between these groups? Are there significant gender or strata variations? Do these groups vary in their self-concepts of ability, in their grade averages, or in their participation in activities while in high school? When the consequences of interrupting one's education are analyzed, do variations in job prestige or salary develop? Are there significant differences in the pattern of eventual educational attainment for these groups? Does self-concept suffer as a result of interrupting one's education or dropping out of university or college?

We will identify the similarities and substantive differences between the social and educational backgrounds of these groups and describe the apparent consequences of membership. To start, we will concentrate on the area of educational interruption.

INTERRUPTION OF EDUCATION

As we mentioned previously, three major directions are available to Ontario youth upon high school graduation. Initially, direct-entry respondents (referred to subsequently as the Direct group) were contrasted with respondents who delayed entry (the Delay group) for at least a year. Gender, strata, SES, high school experiences (including participation in activities), grade average, track, and self-concept of ability were employed in describing the two groups. Our assumption in employing such background variables was that the decision to delay enrollment in a post-secondary institution would relate, for example, to substantive variations in either families' financial status or students' academic or social experiences within secondary school. This assumption, however, was not substantiated by our analysis. Few differences between social background and high school experiences are revealed when the Direct and Delay groups are compared in Tables 5.1 and 5.2. The major exception involves extracurricular participation in general activities. Respondents who tended to participate actively in high school activities were somewhat less likely to delay their entry into post-secondary institutions. For example, less than 3 in 10 highly active participators, but more than 3 in 10 respondents who infrequently participated in extracurricular activities delayed enrollment in post-secondary institutions. An exploration of self-concept of ability in

Table 5.3 fails to reveal any additional features that distinguish the groups.

Given the lack of findings involving high school experiences, we then explored parental encouragement to proceed with post-secondary education; the likelihood of respondents' friends enrolling in universities or CAAT; and the degree to which respondents, while in high school, voiced uncertainty about financing their post-secondary education. Our examination of these relationships brings us closer to an understanding of the two groups. As the task reveals, neither the nature of parental educational expectations nor the potential influence of peers plays a role in influencing members of the Delay or Direct groups. One significant finding revealed by an additional analysis (not contained in our tables) is that a greater proportion of the Direct group had planned, while in Grade 12, to live at home while studying at university or college. Nearly 3 in 10 of the Direct group, but less than 2 in 10 in the Delay group, had formulated such plans. Thus, the Delay group seemed either unable to count on parental subsidy or was a more independent lot.

On item A.8 we asked respondents who had stopped out why they returned to education. The majority of the Delay group gave job-related reasons (Table 5.5); over 5 in 10 returned to improve job opportunities or challenges, to increase promotion possibilities, or simply because their present job was unsatisfying and additional education might help in locating a new job. Fewer than 2 in 10 respondents had originally planned to delay their enrollment and nearly the same number sought a better education.

When the consequences of direct or delayed entry into post-secondary education are investigated with respect to educational attainment, work experiences, and income, several key differences are revealed (Tables 5.6 and 5.7). Respondents in the Direct group (5 in 10) were more likely to be university graduates, compared with respondents in the Delay group (4 in 10). Approximately 3 in 10 students in each group were CAAT graduates, indicating no significant variation in this category. Proportionately more Direct group than Delayed group respondents completed their post-secondary education. Although not reported in table form, nearly 8 in 10 of the former and slightly more than 6 in 10 of the latter received degrees and/or certificates. Naturally, many of these differences may be associated with the time factor involved in delaying or interrupting one's education, eventual completion still being possible for Delay group members.

If we look at the present work of the Direct and Delay groups, there are some discernable differences. Although roughly equivalent proportions in both groups are now working full-time, 8.2% more Delay group respondents work part-time. There are no significant variations in starting salaries, current salaries, or personal incomes between groups; however, proportionately more people who delay their post-secondary enrollment now occupy lower prestige jobs, as revealed by Table 5.7.[3]

Before concluding this section, we should point out that the most striking differences in social background, high school experiences, and subsequent educational/vocational attainments (Table 5.8) occur when respondents in the Direct and Delay groups are compared with respondents who did not engage in post-secondary studies. Of respondents in the lowest SES quartile, fewer than 2 in 10 delayed entry, fewer than 4 in 10 entered directly, and over 5 in 10 did not continue. For respondents in the highest SES quartile, the figures are, respectively, slightly more than 2 in 10, more than 6 in 10, and slightly more than 1 in 10. Whether one continues one's education beyond high school is strongly influenced by socioeconomic background.

Respondents delaying entry are fairly evenly distributed across the four strata. However, nearly 5 in 10 rural respondents chose not to pursue post-secondary studies, compared with less than 3 in 10 urban respondents.

If we examine high school experiences (Table 5.9), further differences are revealed. Of those in academic tracks, over half proceeded directly to post-secondary studies, in contrast to 2 to 3 in 10 respondents in commercial and vocational/technical programs. Nearly 8 in 10 of those with B or higher grade averages and slightly more than 5 in 10 of those with lower than B averages proceeded directly or delayed entry for a year or more. Slightly more than 2 in 10 no-entry respondents had B or higher averages and almost 5 in 10 had lower than B averages. Thus, academic performances of these groups are consistent with their entry statuses. This description is completed when the academic self-concepts of the latter groups are considered (Table 5.10). Whether the evaluation of one's ability is performed in the context of high school classmates or a self-evaluation in terms of doing well in university or college, the results are similar. For example, with respect to the latter aspect of self-concept, nearly 7 in 10 respondents with a low self-evaluation and fewer than 2 in 10 with a high evaluation chose not to continue their studies. Students active in general extracurricular activities were more likely to continue their studies. Over 5 in 10 in the low participation group and fewer than 2 in 10 in the high participation group chose not to continue.

Table 5.11 illustrates that nearly 8 in 10 of the no-entry respondents are now working full-time, in contrast to approximately 6 in 10 in the Direct and Delay groups. Table 5.12 indicates that job prestige, as measured by Blishen scores, is significantly lower for the no-entry group than either the Delay or Direct groups. Although we find significant differences between these groups in starting salaries, no significant variations appear when current salaries are examined. This information reflects the varying dates of entry into the labor market, the no-entry people having entered the labor market earlier, on average, than individuals in the other groups. The 1978 personal incomes of respondents who did not continue their studies probably reflects this time factor, insofar as they receive, on the average, approximately $9,200 a year.[4] This amount is much higher than that received by respondents in the Direct or Delay groups.

Finally, it should be noted that membership in any of these groups does not preclude future enrollment in post-secondary studies (Table 5.13). When asked about the likelihood of enrolling in university or college in the next 5 years, over 4 in 10 in the Direct and Delay groups responded "very likely" or "somewhat likely," compared with approximately one-third of no-entry respondents.

WITHDRAWAL FROM POST-SECONDARY INSTITUTIONS

Student withdrawal from post-secondary institutions is seen as a real problem by students and administrators within universities and community colleges. Developing a clearer understanding of the social and social-psychological factors related to withdrawal constitutes an important first step in dealing with the problem. Withdrawal itself, however, is not a one-dimensional phenomenon. Students may drop out of one institution and enter another. While the first institution may treat that student as a drop-out, the student considers himself a transfer. Another student may withdraw, but enroll later at the same institution or a different one. A third student may withdraw, having decided to pursue a path that excludes post-secondary education for an indefinite period of time.

The advantage of employing a panel, as opposed to an alternative design (e.g., cross-sectional), is that one can follow drop-outs to investigate their status at subsequent time periods. For example, some drop-outs may retain their drop-out status while others who return to post-secondary studies assume a stop-out status. Naturally, the redefinition of status depends largely on the time frame of the panel survey. Therefore, if we were to reinvestigate student withdrawals in 1985, there is a high probability that redefinition of classification would be necessary.

When respondents who had been enrolled at any time in universities or colleges were asked if they had, at any time, withdrawn, 26.4% answered affirmatively. If we inspect student withdrawal proportions by institutional type, however, the differences are revealing. Of those students enrolled only in universities, 21.1% had withdrawn at some time; this figure increases to 25.3% for students enrolled only in community colleges. For students who enrolled at some time in both universities and community colleges, the withdrawal rate is 49.4%.

As we previously mentioned, withdrawal is a complex phenomenon that requires further specifications. For the purposes of this present analysis, three groups are operationally defined:

1. *nonwithdrawers*, or respondents who did not take time off once they enrolled in university or community college;
2. *stop-outs*, or respondents who enrolled in a post-secondary institution, took at least one year off, and resumed their studies either in the same institution or another;
3. *drop-outs*, or respondents who enrolled in a post-secondary institution and (given the time frame of this study) dropped out without returning to that institution or another.

This redefinition of withdrawal alters our understanding of student withdrawal. While the proportion of total withdrawals is 26.4%, fully 55.8% of these student withdrawals returned and completed their studies. When the present positions of withdrawers are examined in Table 5.14, we find that over 2 in 10 nonwithdrawers and over 3 in 10 stop-outs are presently enrolled as full-time students. With reference to part-time student status, less than 1 in 10 nonwithdrawers and more than 1 in 10 stop-outs are currently enrolled. In terms of present work status, over 7 in 10 nonwithdrawers, over 8 in 10 drop-outs, and slightly less than 7 in 10 stop-outs are currently working full-time or part-time. Stop-outs encounter the most serious unemployment problems, with 7.1% being unemployed at the time of this study. Nonwithdrawers fare the best with a 5.2% unemployment rate, and drop-outs fare somewhat better than stop-outs with a 6.9% unemployment rate.

For respondents who only attended universities, as reported in Table 5.15, 8.3% are drop-outs and 12.8% are stop-outs. For respondents who only enrolled in community colleges, 25.0% are drop-outs and 8.4% are stop-outs. The proportions for respondents enrolled in both types of post-secondary institutions are, respectively, 6.1% and 51.0%. It would appear that universities are relatively more effective in retaining students than are community colleges, since a greater proportion of university students are stop-outs.

Some additional light may be shed on the motivations of students who withdraw (Table 5.16). The reasons appear to fall into four distinct areas: financial, academic, work-related, and marital-health. Fewer than 1 in 10 respondents withdrew for reasons of financial difficulty; over 5 in 10 left for academic reasons (e.g., programs did not match personal expectations, level of instruction perceived to be poor, alienation with studies, academic failure); over 1 in 10 departed for marital or health reasons (e.g., wanted to marry, became pregnant); and fewer than 2 in 10 ceased their post-secondary studies for work-related reasons (e.g., entered the labor market, changed job plans).

When drop-outs and stop-outs are compared in terms of reasons for withdrawing, we find some differences in emphasis, though these variations are not statistically significant. Drop-outs more strongly stressed financial difficulty and entry into the labor market as motivating factors in their withdrawal. Stop-outs more strongly emphasized alienation with studies, disappointment with program, academic failure, and poor health.

When stop-outs were asked what prompted them to return to post-secondary studies, their reasons fell into one of three areas: general education, job relationship, and interest in a specific field. As illustrated in Table 5.17, over 5 in 10 stop-outs provided general education reasons: to get more training, to obtain a further degree, to do better in school, to satisfy their parents' desires, and, simply, to continue their education. A further 2 in 10 provided job-related reasons, including the motivation to improve job opportunities or switch fields, the need to obtain a job, and the perception that the present job provided little challenge. Fewer than 2 in 10 stop-outs specified an interest in a particular field, or the development of such interest, as the motivating force in prompting them to return to a post-secondary institution.

In the analysis that follows, we raise a number of questions similar to those considered in comparing the Delay and Direct groups. What similarities and/or differences in social and demographic backgrounds, high school, subsequent work experiences, and personal value orientations can we identify in comparing stop-outs, drop-outs, and nonwithdrawers? Moreover, are the withdrawal differences a function of institutional characteristics, or are they associated with the traits of students?

Social Backgrounds and High School Experiences

No discernable relationship connecting gender with withdrawal was identified, as Table 5.18 shows. Males and females are equally likely to become stop-outs or drop-outs. However, the socioeconomic and regional backgrounds of respondents bear moderately strong relationships to withdrawal. For instance, while nonwithdrawers were equal in all SES levels, proportionately more stop-outs, but fewer drop-outs, had higher SES origins. Drop-outs are slightly more likely to have lived originally in smaller cities or smaller rural areas, while proportionately more stop-outs lived in larger or big cities.

When the high school experiences of withdrawers and nonwithdrawers are examined, academic performance and self-concept of ability as reflected in Tables 5.19 and 5.20 are found to strongly discriminate between the groups. However, involvement in extracurricular activities, whether generally or specifically athletic, is not associated with student withdrawal. As should be expected, drop-outs fared least well in their secondary school academic experiences, with proportionately more receiving lower than B averages, as contrasted with nonwithdrawers or stop-outs. The self-evaluation of ability, both with respect to classmates within high school and the potential for doing well in post-secondary studies, offers additional evidence for the disadvantaged status of drop-outs. Nonwithdrawers clearly have the highest self-concept of ability and drop-outs possess the lowest. These relationships are revealed in Table 5.20. With regard to self-concept in the context of friends or classmates, proportionately more respondents with low, rather than high, self-concepts dropped out. The pattern is different when self-concept with regard to success in post-secondary studies is considered. The trend for nonwithdrawers is similar but decidedly weaker, and the trend for drop-outs is identical. The pattern is reversed for stop-outs; that is, a greater proportion of higher self-concept respondents stopped out.

Let us now return to the question posed earlier: can we attribute the obvious differences in withdrawal rates to traits of incoming students or to institutional characteristics. To help answer this major question, we employed all those student characteristics (SES, stratum, and grade average) with statistically significant relationships to student withdrawal. These characteristics were used as control variables for reinvestigating the relationship of institutional type and student withdrawal. We discovered that none of the student characteristics served to substantially reduce (that is, make statistically insignificant) the relationship of institutional type and withdrawal (Tables 5.21-5.23). Although it is quite possible that there are unmeasured student traits which could resolve institutional variations in withdrawal, our findings suggest that post-secondary administrators should look more closely at their respective organizations in seeking methods of reducing student withdrawals.

Work Experiences, Income, and Personal Values

The consequences of withdrawal for work experiences (e.g., prestige, salary) are somewhat ambiguous when considered as a whole. In terms of the occupational prestige attached to jobs, nonwithdrawers are in the most advantageous position, with an average prestige score of 53.0; drop-outs occupy the least prestigious position, with an average score of 45.6. Starting salaries were also quite different; nonwithdrawers started with an average of $10,698, while drop-outs and stop-outs initially earned $9,364 and $10,161, respectively. In fact, these differences may result from entering the labor market at varying time intervals. However, they are not maintained over time, insofar as no significant variations are revealed when current salaries are examined. This raises some questions concerning the source of convergence in salaries. If the types of work organizations entered by members of these groups are examined (see Table 5.25), strong variations are revealed. Fewer nonwithdrawers than drop-outs currently work in profit-making organizations, but this comparison is reversed for nonprofit-making firms. More drop-outs are self-employed than respondents from the other groups, while more stop-outs become government employees.

Although the three groups do not differ significantly in current salary, they do vary strongly on personal income. Drop-outs, who occupy the least prestigious jobs, have the highest personal incomes (approximately $8,400); stop-outs receive the lowest (approximately $5,600).

Neither self-concept nor fatalism are related to student withdrawal (Table 5.26 and Table 5.27). However, we find that the personal value orientations of respondents vary significantly in the areas of friendship, career or work, involvement in community affairs, and the importance of marriage (Tables 5.28 and 5.29).

When asked what value areas provide the most satisfaction in their current lives, respondents indicated a consistent relationship between value emphasis and satisfaction derived from these values. Both nonwithdrawers and stop-outs more strongly stressed the importance of developing friendships than drop-outs, and also indicated that developing friendships provided more personal satisfaction. However, drop-outs were more likely than stop-outs or nonwithdrawers to place importance on a career orientation and indicated that work commitment provided a relatively high degree of personal satisfaction.

FOOTNOTES

1. Charles E. Pascal and Seymour Kanowitch. Student Withdrawals from Canadian Universities: A Study of Studies. Higher Education Group, The Ontario Institute for Studies in Education, March 1979.

2. Although item A.7 was designed to provide us with these three distinct groups, our analysis of this item indicated that many people actually misinterpreted the meaning of the question. This led to a high degree of misclassification. Therefore, we decided to employ aspects of the education table (i.e., items B.1, B.2, and B.5) to provide a satisfactory operational definition of these same groups. The use of this new classification resulted in the following distribution: 46.2% that enrolled directly in post-secondary institution after high school graduation; 17.6% that delayed entry for at least one year, and 36.2% that chose an alternative direction (N ½ 1522).

3. Note that, with reference to job prestige, larger average scores in this and subsequent tables reflect higher prestige; with regard to personal income, the average scores reflect categories appearing in item D.8 of our questionnaire.

4. Personal income averages are based on item D.8 and consist of income ranges (e.g., response category 07 equals $8,000-$8,999).

TABLE 5.1: COMPARISON OF DELAY AND DIRECT GROUPS ON SELECTED SOCIAL BACKGROUND FACTORS

	Social Background					
	Sex		SES		Stratum	
Nature of Entry	M (%)	F (%)	Low (%)	High (%)	Urban (%)	Rural (%)
Delay	28.1	27.2	27.7	27.5	25.7	29.4
Direct	71.9	72.8	72.3	72.5	74.3	70.6
TOTAL (N)	459	512	382	543	467	504
Significance (p)	N.S.		N.S.		N.S.	

TABLE 5.2: COMPARISON OF DELAY AND DIRECT GROUPS ON HIGH SCHOOL PARTICIPATION, GRADE AVERAGE AND PROGRAM

	High School Experience												
	General Participation				Athletic Participation				Grade Average		Program		
Nature of Entry	High (%)	2 (%)	3 (%)	Low (%)	High (%)	2 (%)	3 (%)	Low (%)	B and Higher (%)	Less than B (%)	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Delay	26.3	26.2	36.6	34.7	29.7	38.6	29.3	28.9	25.9	29.4	26.8	27.6	32.6
Direct	73.7	73.8	63.4	65.3	70.3	61.4	70.7	71.1	74.1	70.6	73.2	72.4	67.4
TOTAL (N)	156	205	145	148	222	149	90	224	523	434	796	69	98
Significance (p)	.07				N.S.				N.S.		N.S.		

TABLE 5.3: COMPARISON OF DELAY AND DIRECT GROUPS ON SELF-CONCEPT OF ABILITY AND FAMILY ENCOURAGEMENT

	High School: Self-Concept and Encouragement											
	Self-Concept: High School Peers				Self-Concept: University				Family Encouragement			
Nature of Entry	Low (%)	2 (%)	3 (%)	High (%)	Low (%)	2 (%)	3 (%)	High (%)	Low (%)	2 (%)	3 (%)	High (%)
Delay	32.8	31.7	27.8	32.2	32.0	28.7	36.2	27.7	30.7	29.7	28.0	36.2
Direct	67.2	68.3	72.2	67.8	68.0	71.3	63.8	72.3	69.3	70.3	72.0	63.8
TOTAL (N)	211	161	167	152	213	170	160	148	184	165	163	178
Significance (p)	N.S.				N.S.				N.S.			

TABLE 5.4: COMPARISON OF DELAY AND DIRECT GROUPS ON PARENTS' EDUCATIONAL EXPECTATIONS, PROPORTION OF PEERS IN POST-SECONDARY INSTITUTIONS, AND DEGREE OF UNCERTAINTY CONCERNING FINANCING POST-SECONDARY EDUCATION

	Parents' Educational Expectations			Proportion Peers in Post-Secondary			Certainty Re Finances			
Nature of Entry	Only High School (%)	CAAT (%)	University (%)	Low (%)	2 (%)	High (%)	Very Certain (%)	2 (%)	3 (%)	Not Certain (%)
Delay	32.4	26.3	27.8	28.7	27.6	27.6	25.1	26.8	26.6	19.0
Direct	67.6	73.7	72.2	71.3	72.4	72.4	74.9	73.2	73.4	81.0
TOTAL (N)	75	210	508	137	232	491	370	250	80	30
Significance (p)		N.S.			N.S.				N.S.	

TABLE 5.5: REASONS FOR RETURNING TO EDUCATION: DELAY GROUP

Reasons For Returning	Percentage
Needed further education for current job	5.4
Continuation of original plans	14.1
Help locate different job	16.2
Wanted a "better" education	12.3
Complete a higher degree	1.1
Increase promotion possibilities	4.8
Improve job opportunities	19.9
Increase job challenges	3.4
Present job was unsatisfying	11.6
Improvement of social status	0.8
Other	10.4
	100%
TOTAL (N)	107

TABLE 5.6: EDUCATIONAL ATTAINMENT, CURRENT WORK, AND STUDENT STATUS BY INTERRUPTION OF EDUCATION

Educational Attainment, Work-Student Status	Interruption of Education Delay (%)	 Direct (%)
Educational Attainment		
University graduate	40.2	49.8
CAAT graduate	31.2	28.8
Some university/some CAAT	28.6	20.6
No post-secondary	0.0	0.7
TOTAL (N)	268	703
Significance (p)		
Work Status		
Full-time	62.1	63.6
Part-time	18.4	10.2
Unemployed	4.2	6.6
Student/housewife	15.2	19.6
TOTAL (N)	264	700
Significance (p)		
Student Status		
Full-time	23.0	23.2
Part-time	4.9	6.5
Non student	72.1	70.3
TOTAL (N)	264	702
Significance (p)	N.S.	

TABLE 5.7: STARTING, PRESENT SALARIES, AND PRESENT JOB PRESTIGE BY INTERRUPTION OF EDUCATION

Starting, Present Salaries and Job Prestige	Delay	Direct
Starting Salaries		
Averages	10,652.9	10,378.8
Standard deviations	3,624.5	3,520.4
TOTAL (N)	165	456
Significance (p)	N.S.	
Present Salaries		
Averages	12,709.6	12,700.8
Standard deviations	4,187.5	3,878.8
TOTAL (N)	166	459
Significance (p)	N.S.	
Personal Income, 1978		
Averages	5.5	5.8
Standard deviations	3.3	3.3
TOTAL (N)	252	677
Significance (p)	N.S.	
Present Job Prestige		
Averages	49.8	51.7
Standard deviations	11.7	11.2
TOTAL (N)	175	478
Significance (p)		

TABLE 5.8: COMPARISON OF DELAY, DIRECT, AND NO-ENTRY GROUPS ON SELECTED SOCIAL BACKGROUND FACTORS

	Social Background									
	Sex		SES				Stratum			
Nature of Entry	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Delay	17.8	17.5	13.3	15.8	18.6	22.6	18.5	17.2	20.4	15.3
Direct	45.4	46.9	35.2	40.7	43.6	64.3	54.8	48.3	47.2	38.1
No entry	36.8	35.6	51.6	43.5	37.9	13.1	26.7	34.5	32.4	46.6
TOTAL (N)	727	795	381	350	332	388	340	333	359	490
Significance (p)	N.S.									

TABLE 5.9: COMPARISON OF DELAY AND NO ENTRY GROUPS ON HIGH SCHOOL PARTICIPATION, GRADE AVERAGE, AND PROGRAM

	High School Experiences												
	General Participation				Athletic Participation				Grade Average		Program		
Nature of Entry	High (%)	2 (%)	3 (%)	Low (%)	High (%)	2 (%)	3 (%)	Low (%)	70% or Higher (%)	Lower than 70% (%)	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Delay	21.8	18.5	23.3	17.3	19.6	26.4	17.6	18.7	20.3	15.5	20.4	8.1	13.9
Direct	61.0	52.3	40.5	32.5	46.3	42.0	42.6	46.0	58.0	37.2	55.9	21.4	28.7
No entry	17.2	29.2	36.2	50.2	34.1	31.6	39.8	35.4	21.7	47.3	23.6	70.5	57.4
TOTAL (N)	189	290	227	297	337	218	149	346	668	824	1042	233	231
Significance (p)							N.S.						

TABLE 5.10: COMPARISON OF DELAY, DIRECT, AND NO ENTRY GROUPS ON SELF-CONCEPT OF ABILITY

	Self-Concept of Ability							
	Self-Concept High School Peers				Self-Concept University			
Nature of Entry	Low (%)	2 (%)	3 (%)	High (%)	Low (%)	2 (%)	3 (%)	High (%)
Delay	18.1	16.6	19.7	16.7	9.4	17.1	18.7	23.9
Direct	41.6	36.3	49.1	59.6	22.7	40.9	55.8	60.6
No entry	40.3	47.1	31.2	23.7	68.0	42.0	25.5	15.5
TOTAL (N)	380	437	321	382	347	347	401	424
Significance (p)								

TABLE 5.11: CURRENT WORK AND STUDENT STATUS BY INTERRUPTION OF EDUCATION

	Interruption of Education		
Current Work and Student Status	Delay (%)	Direct (%)	No Entry (%)
Work Status			
Full-time	60.9	65.1	78.2
Part-time	17.1	11.0	6.6
Unemployed	5.0	6.6	4.0
Student/housewife	17.1	17.3	11.2
TOTAL (N)	299	637	578
Significance (p)			
Student Status			
Full-time	24.1	21.4	1.0
Part-time	5.4	5.9	2.4
Non student	70.6	72.6	96.5
TOTAL (N)	299	639	578
Significance (p)			

TABLE 5.12: STARTING, PRESENT SALARIES, PERSONAL INCOME IN 1978, and PRESENT JOB PRESTIGE BY INTERRUPTION OF EDUCATION

	Interruption of Education		
Salaries, Income and Job Prestige	Delay	Direct	No Entry
Starting Salaries			
Averages	10,652.9	10,378.8	9,086.1
Standard deviation	3,624.5	3,520.4	4,282.8
TOTAL (N)	165	456	400
Significance (p)			
Present Salaries			
Averages	12,709.6	12,700.8	13,143.3
Standard deviation	4,187.5	3,838.8	4,424.0
TOTAL (N)	166	459	408
Significance (p)		N.S.	
Personal Income in 1978			
Averages	5.5	5.9	7.3
Standard deviation	3.3	3.3	3.1
TOTAL (N)	252	677	530
Significance (p)			
Present Job Prestige			
Averages	49.8	51.7	44.4
Standard deviation	11.7	11.2	10.8
TOTAL (N)	175	478	435
Significance (p)			

TABLE 5.13: LIKELIHOOD OF ENROLLING IN POST-SECONDARY STUDIES WITHIN FIVE YEARS OF INTERRUPTION OF EDUCATION

	Interruption of Education		
Likelihood of Enrolling	Delay (%)	Direct (%)	No Entry (%)
Currently enrolled	22.0	18.0	0.5
Very likely	22.3	24.2	10.8
Somewhat likely	19.9	22.9	21.5
Somewhat unlikely	13.2	14.0	15.0
Not at all likely	22.6	21.0	52.1
TOTAL (N)	296	629	572
Significance (p)			

TABLE 5.14: PRESENT WORK AND STUDENT STATUS BY STUDENT WITHDRAWAL

Present Work/Student Status	Student Withdrawal Nonwithdrawers (%)	Drop-outs (%)	Stop-outs (%)
Work Status			
Full-time	63.2	77.5	52.8
Part-time	12.4	9.3	16.5
Unemployed	5.2	6.9	7.1
Student/housewife	19.3	6.3	23.6
TOTAL (N)	701	120	127
Significance (p)			
Student Status			
Full-time	24.6	not	33.6
Part-time	4.6	applicable	14.8
Non student	70.8		51.6
TOTAL (N)	702		128
Significance (p)			

TABLE 5.15: RELATIONSHIP OF STUDENT WITHDRAWAL AND TYPE OF POST-SECONDARY INSTITUTION

	Type of Post-Secondary Institution		
Student Withdrawal	University Only (%)	CAAT Only (%)	Both Types (%)
Nonwithdrawers	78.9	66.6	42.9
Drop-outs	8.3	25.0	6.1
Stop-outs	12.8	8.4	51.0
TOTAL (N)	241	148	49
Significance (p)			

TABLE 5.16: STUDENT WITHDRAWAL AND REASONS FOR WITHDRAWING THE FIRST TIME

Student Withdrawal	Reasons for Withdrawing Financial (%)	Academic (%)	Marital Health (%)	Work-Related (%)	Other (%)
Drop-outs	55.7	46.0	50.1	58.5	32.4
Stop-outs	44.3	54.0	49.9	41.5	67.6
TOTAL (N)	20	141	33	28	24
Significance (p)			N.S.		

TABLE 5.17: REASONS FOR RETURNING TO A POST-SECONDARY INSTITUTION AFTER STOPPING OUT

Reasons For Returning	Percentage
General education (e.g. finish degree, gain further education)	56.0
Job-related (e.g. change jobs, increase opportunities	19.6
Interest in field	17.4
Other	7.0
	100%
TOTAL (N)	130

TABLE 5.18: STUDENT WITHDRAWAL BY SELECTED SOCIAL BACKGROUND FACTORS

	Social Background									
	Sex		SES				Stratum			
Student Withdrawal	M (%)	F (%)	Low (%)	2 (%)	3 (%)	High (%)	Urban (%)	2 (%)	3 (%)	Rural (%)
Nonwithdrawers	71.3	75.7	73.0	74.6	73.6	73.1	73.7	70.7	78.3	71.5
Drop-outs	13.5	11.6	13.4	16.2	12.8	9.4	11.6	10.1	12.6	15.3
Stop-outs	15.2	12.7	13.6	9.2	13.6	17.5	14.7	19.1	9.1	13.2
TOTAL (N)	458	502	182	197	201	335	246	218	242	254
Significance (p)		N.S.			0.09				0.05	

TABLE 5.19: STUDENT WITHDRAWAL BY HIGH SCHOOL PARTICIPATION, GRADE AVERAGE, AND PROGRAM

	High School Experiences												
	General Participation				Athletic Participation				Grade Average		Program		
Student Withdrawal	High (%)	2 (%)	3 (%)	Low (%)	High (%)	2 (%)	3 (%)	Low (%)	70% or Higher (%)	Lower than 70% (%)	Academic (%)	Commercial (%)	Technical/ Vocational (%)
Nonwithdrawers	77.2	76.1	73.1	70.8	73.1	80.0	76.9	72.7	79.2	67.5	74.7	70.4	68.2
Drop-outs	7.2	13.5	12.3	13.8	14.2	9.9	10.3	11.2	7.2	18.4	11.2	21.8	17.8
Stop-outs	15.6	10.4	14.6	15.4	12.7	10.0	12.8	16.1	13.6	14.1	14.2	7.8	14.0
TOTAL (N)	154	203	144	148	220	145	89	222	521	425	791	64	98
Significance (p)		N.S.					N.S.					0.04	

TABLE 5.20: STUDENT WITHDRAWAL BY SELF-CONCEPT OF ABILITY

	Self-Concept of Ability							
	Self-Concept: High School Peers				Self-Concept: University			
Student Withdrawal	Low (%)	2 (%)	3 (%)	High (%)	Low (%)	2 (%)	3 (%)	High (%)
Nonwithdrawers	64.7	69.8	76.4	81.6	70.2	72.7	74.0	75.0
Drop-outs	18.2	16.9	9.0	7.3	19.4	15.9	12.6	8.5
Stop-outs	17.1	13.3	14.6	11.1	10.3	11.4	13.5	16.5
TOTAL (N)	225	227	219	287	110	196	297	355
Significance (p)							0.02	

TABLE 5.21: RELATIONSHIP OF STUDENT WITHDRAWAL AND TYPE OF POST-SECONDARY INSTITUTION, FILTERING ON SES

	Type of Post-Secondary Institution		
Student Withdrawal	University Only (%)	CAAT Only (%)	Both Types (%)
Low SES			
Nonwithdrawers	91.5	81.5	61.5
Drop-outs	8.5	18.5	38.5
TOTAL (N)	135	167	32
Significance (p)			
High SES			
Nonwithdrawers	91.8	76.6	89.9
Drop-outs	8.2	23.4	10.1
TOTAL (N)	281	129	39
Significance (p)			

TABLE 5.22: RELATIONSHIP OF STUDENT WITHDRAWAL AND TYPE OF POST-SECONDARY INSTITUTION, FILTERING ON STRATUM

Student Withdrawal	University Only (%)	CAAT Only (%)	Both Types (%)
Urban			
Nonwithdrawers	94.8	75.0	78.1
Drop-outs	5.2	25.0	21.9
TOTAL (N)	225	116	45
Significance (p)			
Rural			
Nonwithdrawers	87.7	81.8	81.6
Drop-outs	12.3	18.2	18.4
TOTAL (N)	203	200	34
Significance (p)		N.S.	

TABLE 5.23: RELATIONSHIP OF STUDENT WITHDRAWAL AND TYPE OF POST-SECONDARY INSTITUTIONS, FILTERING ON GRADE AVERAGE

	Type of Post-Secondary Institution		
Student Withdrawal	University Only (%)	CAAT Only (%)	Both Types (%)
70% or Higher			
Nonwithdrawers	93.7	88.1	87.7
Drop-outs	6.3	11.9	12.3
TOTAL (N)	298	113	37
Significance (p)		N.S.	
Lower Than 70%			
Nonwithdrawers	85.7	75.4	71.7
Drop-outs	14.3	24.6	28.3
TOTAL (N)	126	197	40
Significance (p)		0.05	

TABLE 5.24: STARTING, PRESENT SALARIES, PERSONAL INCOME IN 1978 AND PRESENT JOB PRESTIGE BY STUDENT WITHDRAWAL

Starting, Present Salaries, Personal Income and Job Prestige	Nonwithdrawers	Drop-Outs	Stop-Outs
Starting Salaries			
Averages	10,698.6	9,364.0	10,161.6
Standard deviation	3,538.8	3,598.5	3,097.2
TOTAL (N)	458	88	70
Significance (p)			
Present Salaries			
Averages	12,829.5	12,652.7	11,951.5
Standard deviation	3,977.0	3,973.2	3,627.4
TOTAL (N)	461	90	70
Significance (p)		N.S.	
Personal Income in 1978			
Averages	5.7	7.4	4.6
Standard deviation	3.2	2.7	3.2
TOTAL (N)	674	114	131
Significance (p)			
Job Prestige			
Averages	53.0	45.6	48.4
Standard deviation	10.8	11.2	11.3
TOTAL (N)	477	98	73
Significance (p)			

TABLE 5.25: TYPE OF PRESENT WORK FIRM BY STUDENT WITHDRAWAL

Type of Firm	Nonwithdrawers (%)	Drop-Outs (%)	Stop-Outs (%)
Profit-making	40.0	53.4	34.5
Government	10.1	11.4	12.9
Non-profit making	13.8	7.9	6.7
Self-employed	1.5	6.7	1.5
Family business (without pay)	2.5	2.1	0.0
Other	32.1	18.6	44.4
TOTAL (N)	706	120	133
Significance (p)			

TABLE 5.26: EVALUATIVE POTENCY AND ACTIVITY COMPONENTS OF SELF-CONCEPT BY STUDENT WITHDRAWAL

Self-Concept	Nonwithdrawers (%)	Drop-Outs (%)	Stop-Outs (%)
Evaluative			
Highest	31.9	25.3	30.0
Moderately High	22.0	30.8	26.4
Moderately Low	23.8	20.2	26.7
Lowest	22.3	23.8	16.8
TOTAL (N)	509	81	91
Significance (p)		N.S.	
Potency			
Highest	30.6	32.2	29.0
Moderately High	24.5	20.5	28.1
Moderately Low	23.5	25.1	18.9
Lowest	21.4	22.1	23.9
TOTAL (N)	509	81	91
Significance (p)		N.S.	
Activity			
Highest	26.6	25.2	24.2
Moderately High	25.1	15.3	24.1
Moderately Low	24.0	31.4	18.8
Lowest	24.3	28.1	32.9
TOTAL (N)	509	81	91
Significance (p)		N.S.	

TABLE 5.27: SENSE OF FATALISM BY STUDENT WITHDRAWAL

Fatalism	Student Withdrawal Nonwithdrawers (%)	Drop-Outs (%)	Stop-Outs (%)
Highly fatalistic	23.8	34.0	21.2
Moderately fatalistic	28.1	21.1	32.9
Moderately low fatalistic	25.6	20.2	19.3
Low fatalism	22.4	24.6	26.6
TOTAL (N)	515	81	91
Significance (p)		N.S.	

TABLE 5.28: PERSONAL VALUES PROVIDING MOST SATISFACTION BY STUDENT WITHDRAWAL

Personal Values: Most Satisfaction	Student Withdrawal Nonwithdrawers (%)	Drop-Outs (%)	Stop-Outs (%)
Developing friendships	25.4	12.6	21.0
Involvement in work/career	22.3	20.9	13.8
Involvement in community affairs	0.8	0.0	0.7
Marriage	20.0	32.3	14.4
Living with companion/partner	4.7	2.7	9.9
Involvement in leisure activities	12.3	14.5	12.0
Developing independent life-style	11.4	12.1	17.3
Other	3.2	5.0	11.0
TOTAL (N)	688	118	129
Significance (p)			

TABLE 5.29: PERSONAL VALUES PROVIDING LEAST SATISFACTION BY STUDENT WITHDRAWAL

Personal Values: Least Satisfaction	Student Withdrawal Nonwithdrawers (%)	 Drop-Outs (%)	 Stop-Outs (%)
Developing friendships	1.8	1.7	2.6
Involvement in work/career	6.5	10.4	12.1
Involvement in community affairs	48.1	52.9	35.7
Marriage	14.9	12.1	18.0
Living with companion/partner	15.8	10.5	12.1
Involvement in leisure activities	3.6	3.2	6.7
Developing independent life-style	9.3	8.1	12.4
Other	0.0	0.9	0.5
TOTAL (N)	665	110	130
Significance (p)		[illegible].05	

CHAPTER SIX

THE LINK BETWEEN EDUCATION AND WORK

INTRODUCTION

The relationship of post-secondary education--particularly university education--to the job market has been a matter of public concern for a number of years. *Maclean*'s magazine, in a June 1979 article entitled "The Class of '79,"[1] described the difficulties university graduates face in finding employment. Liberal arts graduates were seen to be facing the greatest difficulties, with the likelihood of ending up in jobs completely unrelated to their field of study, or in jobs which do not require a university degree. Their difficulties and the demand for professionals in such fields as engineering and business were said to be leading students to enroll in preprofessional majors. One conclusion reached was that today's university students "are looking to a more vocational, pragmatic higher education. . . ."

The Financial Post Magazine of September 1979, in an article entitled "A Matter of Degree,"[2] considers these same issues, but also raises the question of how closely university education should be geared to the labor market. The argument is broached that a liberal education is an education for a lifetime, giving a perspective on the human condition, and is not training for immediate job prospects. Furthermore, the article notes that underemployment is not necessarily bad in itself, since it can mean that general levels of education are rising. When data from Statistics Canada are analyzed, it is found that university graduates do very well in obtaining better, more highly paid jobs, compared with young people with no post-secondary education, and even community college graduates. It is pointed out that if, in a tight job market, employers select degree holders over those without degrees, the difficulties faced by university graduates would be compounded for individuals with only high school education. Finally, the article considers the special difficulties that university-educated women face in a tight job market, where traditional sexism still exists and where women have trained for public sector professional occupations, e.g., health, teaching, social work hard hit by employment cuts.[3]

While there is controversy about how universities ought to adapt to this economic situation, community colleges have received little similar criticism, in large measure because they were originally created to be strongly vocation-oriented. As Horizons (1979-1980), (the government's official guide to post-secondary institutions in Ontario) states, "The colleges of applied arts and technology provide job-oriented programs for high school graduates, and for out-of-school youth and others who may not have completed secondary school".[4] In point of fact, the community college system in Ontario was set up in the late 1960s to provide post-secondary educational opportunity to young people just out of high schools. The reforms to the high school system in the sixties had resulted in raising retention rates, producing a very large number of Grade 12 and Grade 13 graduates from the academic track. It became clear to the government that universities could not--and wished not--to serve the vocational needs of all these high school students. The creation of CAATs offered post-secondary vocational training to the growing segment of young people who were not attracted to a university education, or who could not meet initial university entrance requirements, but who desired further preparation for the labor market.

Though community colleges are strongly vocation-oriented, and have a very good job placement record, they are not immune to problems of matching their programs to the fluctuating needs of the economy. Institutional inertia in program retention and student desire for programs in areas where employment demand is limited and not likely to increase (e.g., communications) can lead to employment difficulties for CAAT graduates. Horace Beach, in a comprehensive analysis of youth employment problems, cites some Ontario data:

> . . . the unemployment rates were low for the university graduates in applied science, commerce, education and medicine and much higher for those in general programs like arts and science. Similar differences by programs are found for community college graduates. . . . Students from technology and applied arts programs have unemployment rates as low as 3.1% while the rates go as high as 19.5% for graduates in creative and visual communications, and community, social and recreational services . . . . However, graduates in the latter programs do much better after a year or so, with unemployment rates dropping as low as 6.7%--much as they decreased for arts and science graduates from universities.[5]

Beach also notes that by an earnings measure of underemployment (based on establishing a minimum-earnings level for a particular level of education), community college students in Ontario had a rate of underemployment almost twice that of university students.[6]

In Phase IV we have explored the link between education and the job market in several ways. We asked respondents to give us the titles of their first and current jobs, and to provide information such as starting dates, starting salary, and current pay. We also asked for their perceptions of the criteria used by their employers in hiring them. Respondents were asked to evaluate how well their education prepared them for their first full-time jobs and how closely their education related to both first and current jobs.

It should be underscored that the data we have obtained on education and jobs are limited by the constraints of a mailed questionnaire. For the university students--the group of main public interest at the moment--we have information which reflects only very early career beginnings. Many of these young people have been in the labor market for only one or two years, but a full understanding of the relationship of education to jobs should rest on a longer follow-up period. Still, we have obtained some interesting information which can be given cautious interpretation.

In this chapter we shall first turn to a consideration of the occupational attainment of our respondents. We shall note the more limited impact of SES and stratum on occupational attainment and the very strong impact of gender and educational attainmnent. Job prestige and salary in first and current jobs will also be examined. Next, the topic of underemployment will be explored in terms of the educational requirements of jobs. Finally, we shall consider how our respondents perceived the value of their post-secondary education for their first jobs, the match of education to their current jobs, and the criteria used by employers to hire them.

THE ATTENUATION OF THE ROLE OF SOCIOECONOMIC STATUS

In earlier chapters we noted the strong role that socioeconomic status played with regard to educational attainment. However, once individuals enter the labor market, socioeconomic status weakens as a determining factor; rather, it is educational attainment itself that is closely linked with job, occupational prestige, and income. We showed that high socioeconomic status facilitates university attendance. However, once university graduation has been achieved, whether an individual has a higher or lower SES background is of little further consequence; university graduates in general tend to obtain high-status and well-paying occupations.

The Statistics Canada Occupational Categories

In examining the link between education and the labor market, we shall consider the first full-time jobs and the current jobs of our respondents. Occupations reported on our questionnaire were coded, using the classification developed by Statistics Canada for the 1971 Census of Canada. This coding consists of identifying 500 separate occupations, called "unit groups," each unit group being a category including many other occupations. Each of these unit groups has a four-digit code. For example, code 2111 is the code for chemists; this category includes agricultural chemists, biochemists, dye experts, fermentologists in the beverage industry, and so on.[7] These 500 unit groups are themselves grouped into twenty-two major groups such as group 21, "occupations in natural sciences, engineering, and mathematics," which includes code 2111, the chemists. The first two digits of the unit group number represent the code of the major group. When we employ the Statistics Canada classification for occupations, we shall use the twenty-two major groupings.

The Blishen Score of Occupational Prestige

Another way to examine occupations is in terms of prestige or social standing. Bernard R. Blishen and Hugh McRoberts have calculated a prestige score for all 500 unit groups that were used by Statistics

Canada in the 1971 census.[8] It should be made clear at this point how these scores were obtained and what they mean, though the discussion is somewhat technical.

In 1965, Peter C. Pineo and John Porter conducted an opinion survey with respect to occupational prestige. Respondents were asked to evaluate 204 occupational titles and were given the following stimulus question: "Now let's talk about jobs. Here is a ladder with nine boxes on it, and a card with the name of an occupation on each. Please put the card in the box at the top of the ladder if you think that occupation has the highest possible social standing . . . ."[9]. The bottom box represented the lowest possible social standing. On the basis of interviews with 793 adults across Canada, scores were computed for each occupation, the scores being a transformation of the mean having a theoretical range of zero to 100. For example, the highest-scoring occupation was that of Provincial Premier, which scored 89.9. On the basis of the Pineo-Porter scores, Blishen and McRoberts were able to assign scores to the census occupational titles.

Blishen and McRoberts found that there were eighty-five occupations in the Pineo-Porter study that matched well eighty-five census occupational titles. Since Statistics Canada gives information on educational and income levels of incumbents of its 500 occupations, it was possible for Blishen and McRoberts to develop a linear regression line formula predicting the Pineo-Porter prestige score for the eighty-five matching census occupations, using the census information on education and income levels for those occupations. The formula was developed first for men only and is: Y (occupational prestige) = 0.3047 X_1 + 0.3677 X_2 + 12.260, where X_1 is the percentage of men working in

1970 in the relevant occupation and whose employment income was $6,500 or more, and where X_2 is the percentage of men in 1970 in the relevant occupation who "had attended at least Grade 12 if the province of schooling was Prince Edward Island, New Brunswick, Ontario and British Columbia or outside Canada, or who had attended at least Grade 11 if their schooling had been undertaken in Newfoundland, Nova Scotia, Quebec, Manitoba, Saskatchewan, or Alberta" (Blishen and McRoberts, 1976). With this formula it was possible to calculate the "Blishen" occupational prestige scores for the remaining census occupational titles. That is to say, the levels of income and education typical of members of a census occupation are used to calculate a prestige score that models the kinds of prestige differences originally found to distinguish different occupations in the minds of the public, as reported by Pineo and Porter. Thus, the Blishen prestige score is, in essence, a rough ordering of census occupations on the basis of information on income and educational levels of holders of those occupations, as reported in 1971.

It should be noted that the occupations of women respondents in our questionnaire survey were given the male Blishen prestige scores since, at the time of coding, only the male scores were available. Subsequently, however, Blishen scores for women for the 1971 census occupations have been computed by Blishen and William Carroll.[10] The use of the male scores for women will not lead to any serious distortions in findings as long as a score is considered as a measure of the social standing of an occupation and is not taken to refer back to the underlying education and income levels which produced the score using the formula. It is generally true that a high Blishen score for a

270

particular occupation can be interpreted as meaning holders of that occupation generally have high levels of education, be they men or women. However, such a relationship is less true for women with respect to income. Since women often do not receive equal pay for equal work, compared to their male co-workers, a high Blishen score for an occupation does not necessarily mean a high income for women in that occupation, though it generally does mean that for men. Blishen and Carroll note with respect to the calculation of separate male and female Blishen scores: "While there is an 81% shared variance between the male and female education variables, the shared variance between the male and female income variables is only 47%. Thus there is a much weaker tendency for the pattern of stratification by income than for stratification by education to be independent of gender."

The Role of Socioeconomic Status and Occupation

In Table 6.4 we have cross-tabulated first full-time jobs for men and women in terms of the twenty-two Statistics Canada major occupational groups by socioeconomic status, stratum, and educational attainment. Table 6.5 is a cross-tabulation of current full-time jobs. Socioeconomic status is presented as two categories, combining the two low SES groups and the two high SES groups. The attentuation of the role of SES in determining occupation early in one's career is demonstrated by these tables. With respect to the SES sections of these tables, there is statistical significance, but it is not as strong as that shown with respect to the educational attainment. The tables demonstrate how educational attainment mediates between social background and career beginnings. For example, 7.7% of low and medium-low SES men had first jobs in the areas of natural science, engineering, and mathematics, as did 12.9% of the men in the two high SES groups. Stated alternatively, of all first job natural scientists, engineers, and mathematicians 40.9% were of lower SES origin, and 59.1% of higher SES background. When considering educational attainment, the differences between groups are even more striking. Of university graduates, 23.4% had first jobs in the natural science/engineering/ mathematics category, as did 16.6% of CAAT graduates. Only 1.9% of those with no post-secondary education were employed in this category. Alternatively, of all first-job natural scientists, engineers, and mathematicians, 57.2% had obtained university degrees, 26.9% had CAAT diplomas, 8.1% some CAAT or university experience, and 7.8% had no post-secondary education. Such relationships hold for women, as well. With respect to occupational career beginnings, then, socioeconomic background appears to play a weak role, especially because of the mediating effect of schooling.

Another way to show the greater effect of schooling, compared with SES, on entrance into the labor market is in terms of Blishen occupational prestige scores. The average Blishen score for first full-time job (for men and women) is 46.75 for the top two SES groups and 43.99 for the two lower SES groups--a difference of 2.76 points, which is statistically significant but not substantively meaningful. By comparison, the average Blishen scores of first jobs by educational attainment show a much larger (and also statistically significant) spread, being 51.65 for university graduates, 47.74 for CAAT graduates, 42.32 for those with some CAAT and/or some university experience, and 41.41 for individuals with no post-secondary education.[11]

272

EDUCATION AND JOB AND CAREER BEGINNINGS

In this section we wish to turn our attention to the types of first and current full-time jobs of our respondents, examining them in terms of occupational category, prestige score, and income. Before doing so, however, certain facts must be kept in mind. In Table 1.7 of Chapter One, important data are presented on the relationship of starting dates of first and current jobs to educational attainment categories. The table demonstrates that the start of both first and current jobs is a function of education: the more education a person obtains the later the entrance into the labor market. The modal years of first-job entrance are: for university graduates, 1978; for CAAT graduates, 1976; for persons with some CAAT and/or university experience, 1975; and for those with no post-secondary education, 1973. Modal years for current full-time job entrance are; for university graduates, 1978; for CAAT graduates, 1977; for persons with some CAAT and/or university experience, 1978. For the no post-secondary group the start of current job varies widely, with no modal year.

Furthermore, as Table 1.8 establishes, respondents who have been in the labor force have had different numbers of full-time jobs, giving rise to what we term different "job changing" statuses. Thus, some respondents have never had a full-time job (but may have worked part-time on occasion); others are not currently working full-time, but may have had one or more full-time jobs in the past (they may be working part-time now); still others might be termed the "job switchers," for these are people whose current full-time job is different from their first full-time job; finally, there are the "steadies," that is, people who have not changed jobs and have worked continuously since taking their first full-time job. Table 6.1 shows how job-changing status is related to the total number of full-time jobs respondents have had since their first full-time job. Having had more than two jobs since high school is not common among our respondents. Even half of the "job switchers" have had only two full-time jobs and another 3 in 10 individuals three full-time jobs. It should be noted that we have information on first and current jobs for the switchers, but for the "no current job" group we have information only on first job.

Gender and Occupations

Regarding occupational attainment, gender is a powerful explanatory factor. In spite of the very marked increase in the educational achievement of women over the last two decades, the gender segregation of the labor market still channels men and women into different--and often highly sex-segregated--occupations. Later we shall examine the relationship of education to occupation for men and women. Here, we shall simply discuss the first and current full-time occupations as reported by our men and women (Tables 6.4 and 6.5).

As shown in these tables, with respect to first full-time job, male-dominated occupations included managerial, administrative, and related occupations; natural sciences, engineering, and mathematics; farming; and all blue-collar occupations (except service occupations). Female-dominated occupations included the social sciences and related fields; teaching and related occupations; medicine and health occupations; and clerical and related work. The first full-time jobs of 6 in 10 women were clerical or related occupations. Of all first jobs, 48.8% of men were in blue-collar jobs (including service occupations, but not farming or the residual category of occupations not elsewhere classified). This compares with 8.8% of women in blue-collar work. Very few women had first jobs in the blue-collar field. The number of women who entered service work, which we consider blue-collar, exceeded the number of women entering all other blue-collar categories combined. Forty-five percent of men had white-collar first jobs, but almost half of these were clerical and sales jobs. Ninety percent of women had white-collar first jobs, but most of these were in the clerical or sales fields. Excluding clerical and sales work and considering the remaining white-collar occupations, 2 in 10 men, but one-quarter of all women, had first jobs in these upper-level white-collar occupations. The only Statistics Canada category displaying gender equality in job beginnings was service occupations.

Turning to the occupational distribution by gender for current full-time jobs, the pattern of male- and female-dominated occupations is basically the same as for first jobs. There are some slight changes of note. Compared with first jobs, there are more men in white-collar fields (47.6%), but the concentration of women remains the same at 91.0%. The proportions in blue-collar work remain virtually the same: 47.7% for men, and 8.5% for women. Almost 6 in 10 women are still in clerical or related work. The proportion of women and men in white-collar work other than clerical and sales jobs rose to 3 in 10. For men and women there were increases over first job in the following occupational categories: managerial, administrative, and related occupations; and natural sciences, engineering, and mathematics. There was a decrease in the category of service work. For women only there were increases in the categories of teaching and related occupations, and medicine and health. For men only there were [illegible] in the categories of artistic, literary, recreational, and [illegible]ed occupations; product fabricating, assembling and repairing occupations; and construction trades. There were decreases for men in the categories of sales and processing occupations.

Finally, the Blishen occupational prestige scores reflect a gender difference, with first-job scores being 43.4 for men and 47.0 for women; current-job scores are 47.1 for men and 50.0 for women. The higher average prestige score for women on average is explained by the heavy concentration of women in clerical work (unit group 4111, for example, the secretaries and stenographers, carries a Blishen score of 52.45) and virtual absence of women in blue-collar jobs (which frequently carry Blishen scores less than 40).

Socioeconomic Status and Occupations

While we argued earlier that the role of socioeconomic status in determining occupational career beginnings is weak compared with the effects of educational attainment, the effect of SES on first and current jobs does not disappear altogether. The SES sections of Tables 6.4 and 6.5 contain the relevant information.

Turning to men first, there are relatively small differences in the first jobs of men from the two higher SES groups, compared with men from the two lower SES groups. Higher SES men more frequently began careers in the categories of natural sciences, engineering, and mathematics, clerical and related occupations; and sales occupations. Lower SES men more frequently began jobs in the categories of processing, machining, and related occupations; product fabricating, assembling, and repairing; construction trades; and transport equipment-operating occupations. In current jobs, most of the same SES differences appear. Two exceptions are the categories of clerical and related occupations and transport equipment-operating occupations, in which there are no differences. A difference does emerge, however, for managerial, administrative, and related occupations.

There are also relatively small differences between the first jobs of women from the two higher SES groups, in comparison with women from the two lower SES groups. Higher SES women tended to be found more frequently in managerial, administrative, and related occupations; social sciences and related fields; and occupations in medicine and health. Lower SES women more frequently held clerical and related occupations. In current jobs, these SES differences appear again more strongly. In addition, women from the two higher SES groups are also found more frequently in the natural sciences, engineering, and mathematics; teaching and related occupations; and artistic, literary, recreational, and related fields.

The role of SES and occupational status is not fully portrayed by the SES sections of Tables 6.4 and 6.5; persons who have never had a full-time job and those not working full-time now are not included. For these groups SES status differences are much more striking than for SES in relation to occupation. It should be recalled that, of our 727 men, 353 are in the two lower SES groups and 341 in the two higher SES groups (SES is not known for 33 men). Of the lower SES men, 7.4% have not had first full-time jobs, compared with 18.2% of higher SES men. The present activity status of these men is mainly being a student, but many are also employed part-time or are unemployed. Apparently, then, the higher SES men can more easily remain out of the labor force than can lower SES men. The same pattern appears for men who are not working now; 13.9% of lower SES males do not have current full-time jobs, compared with 26.1% of higher SES men. Again these men are presently mainly students, but many are also employed part-time or are unemployed (see Table 6.7).

Of our 795 women, 378 are of lower SES origins, and 379 of higher SES origins (SES could not be determined in 39 cases). As with the men, there are striking SES differences for those who have not had first jobs or for those not now working full-time. Of the lower SES women, 10.6% have not had first jobs, whereas for the higher SES women the proportion is 15.3%. With regard to present activity status, half of these women are full-time students, 14% are housewives, and the rest are part-time employees or unemployed. With respect to current job status, 34.9% of lower SES and 33.8% of higher SES women are not working--almost equal proportions. Here the SES differences are reflected not in different SES proportions not working, but with respect to SES differences in what nonworking women are currently doing. Almost 4 in 10 lower SES nonworking women are housewives, and only 15% are full-time students; one-quarter of the higher SES nonworking women are housewives, and 4 in 10 are full-time students (see Table 6.7).

The SES sections of Tables 6.4 and 6.5 indicate the average Blishen scores by the two SES groups for first and current jobs by gender. The differences are statistically significant for men between the two SES groups for both first and current jobs, but not for women. The rise in prestige scores between first and current jobs for both men and women probably reflects the fact that first jobs are often viewed as a way station to better jobs that, aside from carrying better salaries, are often more prestigious.

Region and Occupations

In previous chapters we showed that being from Strata 4, (small towns and rural areas), was strongly related to educational attainment. We shall also explore the relation of strata to occupational attainment. Tables 6.4 and 6.5 show first full-time and current jobs in relation to being from cities (Strata 1, 2, and 3) or from rural areas (Strata 4), using the census occupational categories. For men, the relationship is statistically significant and moderately strong for both first and current jobs. For women, there is less significant respect to first jobs and no significance with respect to current jobs.

Men from the cities, compared with men from the rural areas, more frequently had first jobs in natural sciences, engineering, and mathematics; clerical and related occupations; sales and service occupations; and materials handling jobs. Rural-stratum men had first jobs more frequently in farming; machining and related occupations; product fabricating, assembling, and repairing; and, especially, construction trades. With respect to current jobs, the pattern of differences is not quite the same. Men from cities tend more frequently to be found in managerial, administrative, and related occupations; natural sciences, engineering, and mathematics; artistic, literary, recreational, and related occupations; clerical and related occupations; service jobs; and materials handling occupations. In contrast, rural men have current jobs more frequently in farming; machining and related occupations; product fabricating, assembling, and repairing; and, especially, construction trades. Women from cities were more frequently in clerical and related occupations in their first jobs; rural women were more frequently found in teaching and related occupations.

These differences suggest that in small towns and rural areas, compared with cities, there are fewer white-collar jobs for both men and women; in particular, fewer managerial, clerical, and service jobs. The greater frequency of rural men in farming and construction trades suggests that rural areas predispose men to particular out-of-doors occupations, and perhaps to blue-collar work in general. The lack of difference in women's current occupations, we suspect, is due to the fact that half of the women from rural areas have moved to cities.

There are urban/rural differences with respect to the occupational prestige of first and current jobs (as shown at the bottom of the stratum sections of Tables 6.4 and 6.5). On first jobs, urban men (Strata 1, 2, and 3) had an average job prestige score almost five points above rural men (45.5 versus 39.9, respectively); urban women, on average, were only two points higher than rural women (47.7 versus 45.6, respectively). With regard to the occupational prestige of current jobs, urban men score six points higher than rural men (49.5 versus 43.5, respectively), though urban women remain two points higher than rural women (50.5 versus 48.6, respectively). The gap in prestige scores between urban- and rural-origin men is an indication of the greater concentration of blue-collar occupations among rural-origin men who, largely, still reside in or near the areas where they went to high school.

Educational Attainment and Occupations

Tables 6.4 and 6.5 also display the relationships of first and current jobs to educational achievement in 1979, these relationships being quite strong and highly statistically significant. It should be noted that our underlying assumption is that jobs follow education. We argued earlier that this is generally the case (Table 1.7). We have, though, directly compared the last year of post-secondary education, whether full-time or part-time, with the starting years of first and current jobs, with the results shown in Table 6.3. This table indicates 3 in 10 university graduates and one-third of the CAAT graduates began their first full-time job prior to graduation. Approximately half of students with some university and/or CAAT experience began their first jobs before leaving school. With respect to current full-time jobs, about 1 in 10 university and CAAT graduates started their current full-time jobs before finishing their education. One-fifth of those with some university and/or CAAT experience took their current job before leaving school. Thus, in a cause-and-effect sense, caution must be exercised in relating educational attainment in 1979 to first jobs, but such caution need not be exercised with respect to current job.

Considering men and their first full-time jobs, three-quarters of men with university degrees started in white-collar jobs (of these, almost half were in managerial and administrative, or natural science, engineering, and mathematics occupations, and one-third in clerical and sales occupations). About one-fifth of these men obtained blue-collar work as first jobs (one-quarter of these men were supervisors, foremen, inspectors, or management). For men with CAAT diplomas or certificates, slightly more than half had white-collar first jobs (of these, over 4 in

10 were in clerical and sales); 43.9% were in the blue-collar categories (of these, only about 1 in 10 were supervisors, foremen, or inspectors). Just about half of men with some CAAT and/or university experience were in blue-collar occupational categories; the remainder were white-collar workers (almost three-quarters of these were in clerical and sales work). Finally, of men with no post-secondary experience, three-quarters were in blue-collar jobs (6% as foremen, supervisors or inspectors), with one-quarter in white-collar occupations. Of this latter group, 7 in 10 were in clerical and sales work.

Another way of expressing the power of education in the occupational selection process is in terms of occupational recruitment patterns (the row percentages of Tables 6.4 and 6.5, not presented). In terms of the first jobs of men, the managerial and administrative, the natural science, engineering, and mathematics, and the artistic, literary, and recreational occupations drew half or more of their recruits from university graduates alone. With the exceptions of the service, the materials handling, and the other crafts categories, all blue-collar occupational categories drew half or more of their recruits from men with no post-secondary education. The only occupational categories drawing from all educational categories for first jobs were the clerical and sales categories; other categories with wide representation from different educational levels were the artistic, literary and recreational; the service; and the other craft and equipment-operating categories.

With regard to the recruitment of women into first jobs, managerial and administrative, natural sciences, engineering, and mathematics, and teaching occupations drew half or more of their women incumbents from women with university degrees, and the medicine and health category drew 7 in 10 of their recruits from women with CAAT diplomas or certificates. For women, the artistic, literary and recreational, the clerical, the sales, and the service occupational categories drew widely from across all educational attainment levels, though in each category, one educational level usually stands out as the largest source of recruits.

As Table 6.4 shows, 90% of all women entered white-collar work in their first jobs. Of all women, the university graduates were clearly advantaged in being able to enter many upper white-collar occupations. Roughly, almost 4 in 10 women university graduates had first jobs in the categories of management and administration; natural sciences, engineering, and mathematics; social sciences; and medicine and health occupations. Surprisingly, almost half of all university degree women were found in first jobs of clerical and sales work (5.2% of women in clerical and sales being supervisors). Also, almost half of women with CAAT diplomas/certificates had first jobs in the clerical and sales categories. Another large concentration (30%) were in the medicine and health category (of these, 54.9% had first jobs as nurses), and modest concentrations were in social sciences and in teaching occupations. Three-quarters of women with some university and/or CAAT experience, and 85% of women with high school only had first jobs in the clerical and sales fields. The only blue-collar category which drew a relatively substantial number of women for first jobs was service occupations (drawing an average of 5% from all educational levels).

Patterns of current full-time jobs by educational attainment by gender are similar to the ones just described. The main difference is the increase in proportion of persons in upper white-collar work, probably reflecting the later entry of university and CAAT graduates. With respect to current job, 81.6% of university degree men are found in white-collar work (14.0% in blue-collar categories) and are concentrated in only five occupational categories, in rank order these being: natural sciences, engineering, and mathematics (30.1%); managerial and administrative (14.4%); sales (13.3%); clerical (11.0%); and artistic, literary, and recreational occupations (6.3%). Six in 10 men who are CAAT graduates are also in current white-collar jobs concentrated in five categories: natural sciences, engineering, and mathematics (20.8%); sales (11.3%); clerical (10.7%); managerial and administrative (6.4%); and artistic, literary, and recreational occupations (5.0%). Of the 4 in 10 CAAT graduate men in blue-collar categories, one-third are in product fabricating, assembling, and repairing, and 3 in 10 are in construction. The current jobs of men with some university and/or CAAT experience split 46.6% to 51.2% between white-collar and blue-collar categories, respectively. Almost 6 in 10 of the white-collar men in this group are in clerical and sales work; in the blue-collar categories concentrations occur in product fabrication, assembling, and repairing; construction trades; materials handling; and machining occupations. For men with no post-secondary education, 7 in 10 have current jobs in blue-collar categories and one-quarter are in white-collar fields. Of this latter group, 6 in 10 hold jobs in the clerical and sales categories.

An examination of recruitment for current jobs for men and women indicated that managerial and administrative; natural sciences, engineering, and mathematics; teaching; and artistic, literary, and recreational occupational categories drew from 4 in 10 to 7 in 10 of their incumbents from university graduates. For women, the medicine and health category drew three-quarters of its incumbents from women CAAT graduates. With the exception of the service occupations, all blue-collar categories recruited from 5 to 7 in 10 men from the high-school-only group. For men, the clerical and sales categories are the most representative of all educational levels, with service and artistic, literary, and recreational occupations also drawing widely from different educational groups. For women, the social sciences, the artistic, literary, and recreational, the clerical, the sales, and the service occupations draw widely from across the different educational groups, though in each category one educational group usually stands out as the largest source of recruits.

Blishen occupational prestige scores tell much the same story about the relationship of educational attainment to first and current jobs. In general, the higher the educational attainment of an individual, the higher is the occupational prestige of first and current jobs. This holds true for men and women, as the Blishen scores at the bottom of Tables 6.4 and 6.5 show. However, Blishen scores add additional information about the education-occupation link. Firstly, they show that current jobs, on average, have more prestige than first jobs. The average Blishen score for men is 43.4 on first jobs, but 47.0 for current jobs; for women the rise is from 47.0 to 50.0. For men, all educational groups seem to raise their prestige equally between first and current jobs, specifically by about four points. In contrast, the rise for women is, on average, three points.

We noted earlier that women had higher Blishen scores on average than men; this was explained by the concentration of women in the moderately high-prestige category of clerical work and their absence from blue-collar work (where men are found in large numbers). With respect to occupational prestige, gender, and educational attainment, however, more can now be said about this gender difference in prestige scores. University degree men on average have higher job prestige in their first jobs than university degree women (scores of 52.9 versus 50.5, respectively); in contrast, women on average do better for all other levels of education. Men graduates from both universities and CAATs on average do better in terms of occupational prestige in their current jobs than women graduates (at the level of university graduation, 57.1 versus 52.8, respectively; at the level of CAAT graduation, 51.0 versus 49.7, respectively). Women with some university and/or CAAT experience, or with high school only, do better than men with these levels of education in terms of current job prestige. It seems clear, then, that at the higher levels of educational attainment, men, more easily than women, can obtain the higher-prestige upper white-collar jobs. At the lower levels women do better in terms of occupational prestige by shunning blue-collar work and opting for clerical and sales jobs; men much more often take the lower-prestige blue-collar occupations.

Educational attainment relates to not having a current job. Of the men in our sample, 21.3% are not currently working full-time. By educational attainment, 40.5% of male university graduates (N = 227) do not have current jobs. With respect to present activity status (Table 6.7), 7 in 10 of these men are still full-time students and an additional 16.7% are unemployed. Men in other educational statuses not having current jobs are too few to treat meaningfully; most of these men are full-time students, though men who have high school only are not students and tend to be employed part-time or unemployed.

Of the women in our sample, 35.1% do not have a current job: 44.0% of university graduates (N = 232), 22.7% of CAAT graduates (N = 181), 37.4% of women with some university and/or some CAAT experience (N = 99), and 35.0% of those with high school only (N = 283). Analyzing these groups by responses to item A.1 (Table 6.7) shows that 6 in 10 of the women with university degrees are still students; fewer than 1 in 10 are housewives; and almost 2 in 10 are unemployed. Of the women who are CAAT graduates, fewer than 1 in 10 are students; almost 3 in 10 are housewives; and almost one-quarter are unemployed. Over one-third of women with some university and/or CAAT experience are students; one-third are housewives; and 11% are unemployed. Of the women with high school only, 2% are students; 6 in 10 are housewives; and 16% are unemployed.

EDUCATION AND INCOME

Another aspect of the relationship between education and the labor market is income--the earning power associated with different kinds of jobs. Respondents were asked to provide us with wage or salary information for their first and current full-time jobs, both with regard to starting pay, and, for current job, current pay. In order to make information on pay comparable, all wage and salary amounts were converted into yearly pay. Thus, the figures which we discuss below are a measure of the earning power on an annual basis (assuming full-time, full-year employment) associated with occupations, and should not be taken as equivalent to annual personal income.

Great public interest adheres to the question of whether more years of education can be turned into higher income jobs. As larger and larger proportions of the population obtains post-secondary education, especially university education, it is reasonable to expect that the highly educated would not be able to command the high incomes, on average, as did the small highly educated "elite" of several decades ago. However, our findings on education and income trends turn out to be inconclusive because of sample size and the timing of entrance into the labor market. Since most of our university graduates have only very recently entered the job market, it is still too soon to determine whether their careers will provide greater lifetime earnings than careers or jobs based on CAAT or high school education.

Table 6.8 shows average starting salaries for first jobs, and starting and present salaries for current jobs. The data on starting pay in both first and current jobs show that the more education a person has, the higher the starting pay, with men earning more than women. For present salary, the trends are not clear by level of education. The problem with this kind of data is that there is no control for year of entrance into the labor market. More recent entrants will earn more due to inflation; those who have been in the labor market longer will earn more due to experience. Table 6.9 attempts to resolve these problems by introducing year of job start into the analysis. When job start is introduced, however, a cell size problem develops which makes it very difficult to compare the earnings of different educational groups. Thus, there are too few university graduates who entered the job market in 1974-75, a year when numerous individuals with only high school education did so. With this limitation in mind, still Table 6.9 is valuable.

Examining starting salary in first job, 1974-75 women CAAT graduates did very well in comparison with women with only some CAAT and/or some university, or high school only; 1976-77 women CAAT graduates did somewhat better than did university degree women. In contrast, 1974-75 male CAAT graduates did not do much better than high-school-only men or men with some university and/or CAAT experience.

With regard to starting salary for current job, the high-school-only men did best ($13,530 based on 12 months), followed by men with university degrees ($12,757). The gap of almost $800 between these two groups does not appear to be much of a pay-off for experience for the high-school-only men and thus, the highly educated seem to be doing quite well by comparison. If the relationship of starting pay to education is not strong for men, for women it is very strong. For 1976-77 and 1978-79 entrance years women with university degrees and CAAT diplomas/certificates do much better than women with limited or no post-secondary experience.

Turning to present salary in current job, we find that present salaries of men with only a high school education do not vary much by year of entrance into the job market, which is odd considering that experience should have a moderately strong relationship to income (the 1971-72-73 men have been in the labor market for from six to eight years). The high-school-only men whose current jobs date from 1978-79 earn $945 more than university graduates entering the job market in the same years. This spread in earnings can be viewed in two ways. One might argue that the lower earnings of the university graduates represent the consequence of a labor market flooded with highly trained people (assuming that highly trained people should earn very high incomes). This would indicate the economic devaluation of a university degree. On the other hand, it might be argued that the $13,521 average for university men is only a floor, and their earnings will climb rapidly as their careers progress. (Thus, at some point their earnings would rise considerably above those of their high-school-only contemporaries). Also worth noting is the fact that CAAT graduate men entering current jobs in 1978-79 do a bit better in terms of salary than do university men. (Some of these men have had several years of labor force experience, which probably accounts for much of the noted CAAT advantage.) How these three groups of men will fare in the future--whether the university graduates will out-earn the others eventually--only subsequent research can determine. It may be that the kind of occupation or industry one enters is more crucial to fast income growth than the kind of post-secondary institution one has attended. If this were the case, then selection of program in a post-secondary institution which is closely linked to particular occupations would be the determinant of success in terms of income rather than whether one is a university or CAAT graduate in general.

When the current pay of women is examined by educational attainment, there is a clear hierarchy for women entering current jobs in 1976-77, with higher pay for higher levels of education. However, for women beginning current jobs in 1978-79, CAAT graduates earn $633 more than university graduates. It can not be determined if this difference is unique for that year or whether university degree women will improve their incomes more rapidly than CAAT graduates, so that the hierarchy noted for the 1976-77 year will reassert itself.

In brief, our income data based on one cohort are too limited to make a judgement on the economic value of relative amounts of education. Only for women does university or CAAT graduation have a strong economic benefit. For men, the labor-force experience of the high-school-only group puts them ahead of university or CAAT graduates for the time being. For men and women who are recent labor-market entrants, CAAT graduation brings better pay than university graduation. Again, the relevant question is whether this difference will persist. Since university graduate men are more frequently in upper white-collar occupations than CAAT graduate men, we expect in the long run that the careers associated with these occupations will bring more income to the university degree men. University degree women in upper white-collar occupations will probably also do better than most women CAAT graduates in the long run. Women in general, however, will not do as well as men because--and this holds for many highly educated women as well--so many of them are in clerical and sales occupations which have limited income-growth potential.

POST-SECONDARY EDUCATION AND UNDEREMPLOYMENT

Underemployment refers to situations in which individuals are employed at jobs which do not fully utilize their training and talents. In the present period of slow economic growth, when large numbers of graduates are leaving post-secondary institutions, over-supply of the highly trained is an emerging reality. Given the long-term increase in average levels of education and the thrust of industry to simplify many jobs so that lower rates of pay are justified, some critics claim that, as a condition of modern life, most people will be underemployed. Whatever the roots of the problem, our present era is concerned with the issue of underemployment.

Underemployment is a very difficult phenomenon to document. To measure it would mean, in effect, to catalog the nature of all the occupations in the economy, assessing skill requirements, and then to collect information on the incumbents of those jobs with respect to their skill levels. In fact, economists have only begun to explore the problem and to experiment with measures.

In this section we examine underemployment in an exploratory spirit. The Canadian Classification and Dictionary of Occupations 1971, Volume One (the CCDO),[12] describes over 6,000 occupations in some detail giving considerable information on duties performed. One main purpose of this compilation and classification is to serve as an aid in career counselling. Under each occupational unit group number (four digits) additional occupations are listed and described (based on a further three digits). Accompanying the descriptions is a coding scheme entitled "qualifications profile factors." By this coding an occupation is assessed in terms of eight factors, the main one of interest being General Educational Development (GED). (Other factors include specific vocational preparation requirements, physical activities of the job, environmental conditions of work, and so on.) GED indicates the educational requirements of a job, which may be interpreted broadly as being elementary school, high school, or post-secondary education.[13]

We recorded all the unit group occupations that our respondents held as first or current full-time jobs. We computed an average GED score for each unit group, using the GED levels indicated for the detailed occupations (seven digits) listed under the unit group. We then listed all the first and current jobs of our Phase IV respondents by unit group by educational attainment levels for men and women separately. By using the average GED scores for each unit group, we could then make an estimate of the degree to which respondents with university degrees and CAAT certificates and diplomas had jobs that did not require the level of education they had attained. The results are shown in Table 6.10 .

On the basis of average GED scores, the proportion of underemployment for university degree men in first full-time jobs was 53.7% and for university degree women 63.3%. For current full-time jobs the proportions are 42.0% and 56.1%, respectively. These levels of underemployment are substantial, but somewhat difficult to interpret without comparable data on cohorts of university graduates for prior years. The decline in underemployment as the shift from first to current job is made does indicate that university graduates make some effort to bring job qualifications in line with their educational background. The figures also show that women have a more difficult time than men in obtaining work that fits their level of educational attainment.

Surprisingly, the data in Table 6.10 show greater underemployment of CAAT graduates than university graduates. In first jobs for CAAT graduates, 78.1% of men and 65.7% of women were underemployed; for current jobs the proportions are 76.8% and 57.2%, respectively. This higher underemployment (probably unrealistic) reflects the fact that the majority of CAAT graduates take jobs which the CCDO regards as requiring

293

only high school preparation. Interestingly enough, women CAAT graduates do better than men CAAT graduates with respect to underemployment rates. We would attribute this difference to two facts: disproportionately more of the men are in blue-collar occupations (41.4% compared with 8.7% of the women), which the CCDO generally lists as requiring a high school education or less; secondly, one-third of the women hold medicine- and health-related occupations, which the CCDO generally lists as requiring some post-secondary education. Women CAAT graduates have also improved the GED levels from first to current jobs, but CAAT graduate men have improved little.

Table 6.11 presents information on current jobs in terms of Blishen score categories, and current pay in categories by educational attainment for men and women. In general, a high level of educational attainment indicates a high job prestige score. Only one-quarter of all university graduates have job prestige scores of less than 50, scores typical of blue-collar occupations. For CAAT graduates, one-third of the women have current jobs with prestige scores of less than 50, whereas 4 in 10 men are in this range. For men with no post-secondary education, 8 in 10 have prestige scores of less than 50. However, of women with no post-secondary education, only 4 in 10 have low prestige scores. In summary, the majority of men who are post-secondary graduates have Blishen scores of 50 or above, while the majority of men with less than post-secondary graduation have scores of less than 50. Majorities of women in all educational groups have occupational prestige scores of 50 or above, including almost three-quarters of university graduate women.

We attempted to determine whether the high underemployment of post-secondary graduates, as measured by GED levels, would be reflected in data on current job pay, low levels of pay for the highly educated indicating underemployment. But, as the lower part of Table 6.11 shows, there is little variation in current pay distributions by levels of educational attainment. Roughly equal proportions of university graduates and persons with no post-secondary education are poorly paid; similarly, roughly equal proportions are highly paid. Using an annual pay of $9996 or less as low pay would show only 1 in 10 university graduate men as being underemployed, though one-third of university graduate women could then be described as underemployed. In fact, the data show that, whatever the level of educational attainment, from one-third to 4 in 10 women earn $9996 a year or less in their current jobs. Truly, then, in terms of an income measure, it is women with post-secondary degrees who are substantially underemployed, three times as many compared with the number of men.

RESPONDENTS' PERCEPTIONS OF THE LINK BETWEEN EDUCATION AND JOBS

Evaluation of the Post-Secondary Educational Experience

Because of the expressed concern about underemployment, recent graduates might now be questioning the value and/or relevance of a university education in establishing a career. Thus, we enquired of everyone about the usefulness of their most recent educational experience (item A.6), and, of those who have had post-secondary education, the value of various aspects of the university and CAAT experience with respect to work obtained after leaving school (item B.18).

Respondents' evaluation of the usefulness of their most recent educational experience was discussed at the beginning of Chapter Three. Two factors were identified on item A.6: a general usefulness factor and one incorporating the relationship of education to job training and job selection. Table 6.12 indicates the evaluation of these two factors by institution last attended by gender. So as not to repeat earlier findings, it will be remarked here only that the majority of post-secondary students perceived their university and CAAT education as generally useful, whereas the majority of respondents with high school only viewed their education as occasionally or rarely useful. With regard to job-related usefulness, the same pattern of evaluation was found. Men and women did not differ in evaluating university or high school in terms of general usefulness, but women more frequently than men believed that their CAAT experience was more generally useful. Men and women did not differ in evaluating university with respect to job-related usefulness, but women with CAAT experience or who are only high school graduates perceived their education as more useful with respect to jobs and careers. In brief, most post-secondary graduates saw their education as having been generally useful and useful for jobs and careers.

Item B.18 of the questionnaire asked: "Which aspects of your community college or undergraduate experience were most valuable in preparing you for the work you obtained after leaving school?" Table 6.13 summarizes the former students' evaluations of courses in major field or specialization; courses outside the major or specialization; friendship or contact with other students; relationships with faculty members; and extracurricular activities. Only respondents whose first full-time job began in their last year of post-secondary education or later were selected for inclusion in this analysis.

There is a generally positive response to courses in the major or the field of specialization, with CAAT students being more positive than university enrollees; 7 in 10 CAAT students and 5 in 10 university students believed that their major courses were very valuable or valuable.[14] However, a high proportion of former university students--30%--did not find their majors of value. Upon further analysis, this negative evaluation is related to university students who did not receive a degree (upper portion of Table 6.14). Whereas 3 in 10 university graduates did not find their majors valuable, half of the nongraduates expressed this view. There was a similar relationship between CAAT graduates and CAAT nongraduates; the former were negative in less than 1 in 10 cases, the latter in 4 in 10 cases.

Obtaining high grades is also related to a positive evaluation of major. Five in 10 university students and 8 in 10 CAAT students who earned As and Bs (cumulative post-secondary GPA) believed their majors or specializations were very valuable or valuable, compared with 4 in 10 university and almost 5 in 10 CAAT students whose grades were Cs or less (middle portion of Table 6.14). Finally, three-quarters of community college women, compared with about 6 in 10 men, found courses in majors or specializations valuable; however, there was no gender difference for university students (lower portion of Table 6.14). Thus, dissatisfaction with one's major in terms of job preparation is clearly related to lack of completion and lack of academic success as measured by grades. The greater satisfaction of CAAT students compared with university students is consistent with the different missions of colleges and universities.

In general, responses to the other evaluation items follow a similar pattern (Table 6.13). From about 1 to 3 in 10 individuals with post-secondary education found non-major courses, friendship or contact with other students, relationships with particular faculty members, or extracurricular activities very valuable or valuable; 4 to 8 in 10 found these experiences not very valuable or not at all valuable. Next to courses in one's major or specialization, friendship or contact with fellow students was seen to be of most value, and extracurricular activities to be least frequently valuable. However, 2 in 10 university enrollees valued extracurricular activity compared with fewer than 1 in 10 persons with a CAAT experience.

Perceived Relationship of Post-Secondary Education to First Full-Time Job

In the portion of the questionaire dealing with post-secondary educational experiences, we asked respondents who had worked after leaving college or university how concerned they were that their jobs related to their program or course of study. As the top portion of Table 6.15 indicates, majorities of university and college graduates wanted a strong relationship between their education and their jobs, with CAAT graduates showing somewhat greater concern than university graduates, and women showing somewhat more concern than men. Surprisingly, however, a majority of students with some university and/or CAAT experience indicated neutrality or unconcern. This latter finding may reflect the fact noted earlier that noncompleters were not as frequently convinced of the value of post-secondary education as graduates.

When asked whether their first job was closely related to their education (the lower portion of Table 6.15), slightly fewer than half of university students reported that it was very closely or closely related, with close to three-quarters of CAAT graduates indicating a close relatedness. In contrast, almost three-quarters of the respondents with some university and/or CAAT experience reported little relationship.

We also asked respondents who indicated in item B.20 that their first job after leaving college or university was only somewhat, not too, or not at all related to their program or course of study, why this was the case, giving them a number of possible of response alternatives (item B.21). They could indicate three reasons in order of importance. Because item B.21 was skipped in the telephone interview, and because of a higher nonresponse rate to this item, though 350 persons indicated a weak relationship of program to job on item B.20, only 197 persons gave at least one reason to item B.21. Because of the many response alternatives to this question, small frequencies resulted when comparing subgroups. We therefore only discuss trends very generally.

When asked why their first job was not related to program or course of study, men and women most frequently indicated as first most important reasons, that "employment opportunities were scarce for people in jobs related to my program...," or that they "could not get a closely related job, but would prefer one," or that "first job was unrelated to program ... and I became interested in this type of work" (each reason selected in about 2 in 10 cases). Another frequent response was "never planned to take a closely related job" (about 1 in 10 cases). Women often mentioned that "very few jobs seemed related to my program" (1 in 10 cases). In terms of educational achievement, university graduates more frequently indicated as first most important reason, "employment opportunities were scarce..." (3 in 10 cases), and that they "could not get a closely related job, but would prefer one" (2 in 10 cases). CAAT graduates and those with some university and/or CAAT experience indicated most frequently that "first job was unrelated to program... and I became interested in this type of work" (2 in 10 cases) and that they "could not get a closely related job, but would prefer one" (more than 1 in 10 cases). Thus, lack of jobs related to program or course of study is the main source of difficulty reported.

Respondents were asked to indicate their perceptions of the first and second most important criteria used by their employer in hiring them for their first full-time job (questionnaire item C.27). As shown in Table 6.16 (the first reason given is cross-tabulated by the second), the most frequent first factor indicated was "personality or how you presented yourself" (39.0%), with educational qualifications the next most frequent choice (27.3%). Respondents who selected "personality" as the first most important factor most frequently indicated "educational qualifications" as the second most important factor (56.0%), and those who selected "educational qualifications" most frequently selected "personality" as the second factor (69.7%). Table 16.17 shows the differences between gender and educational attainment groups. Women stressed "personality" and "educational qualifications" somewhat more than men; men stressed "connections" more frequently than women. "Personality" was most frequently given as the most important reason by all educational attainment groups except the CAAT graduates, who most frequently selected "educational qualification." The no post-secondary group listed "others" as their second most frequent explanation after "personality," and often selected "connections."

These results regarding perceived reasons why employers hired respondents for their first job suggest that all of our respondents believe educational qualifications are important, but not as important as personality. There is, apparently, a strong belief on the part of respondents that individual initiative plays a key role in one's occupational future, with educational qualifications as "back-up". In all, 4 in 10 of our respondents (N = 688) gave some combination of personality and educational qualifications as reasons for why they were hired for first job following education.

Perceived Relationship of Post-Secondary Education to Current Full-Time Job

Respondents were asked about the criteria they believed their employers used in hiring them for their current full-time jobs (questionnaire item C.13). The results on this item are shown in Table 6.18 and are similar to those relating to first full-time jobs. "Personality" is most frequently given as the most important reason (41.1%), followed by "educational qualifications" (21.8%). Those who gave "personality" as the first most important reason most frequently gave "educational qualifications" as the second most important reason (48.9%), and those who gave "educational qualifications" as the first most important reason most frequently gave "personality" as the second most frequent reason (62.6%). The main difference in response patterns between current job criteria and first-job criteria is that the response "qualifications obtained elsewhere" was much more frequently used in relation to current jobs. This suggests that previous job experience begins to compete with educational qualifications after one or several job changes. Interestingly enough, "personality" is still the most frequently cited reason given by our respondents in explaining why they were hired for their current jobs.

With respect to first most important reason employer hired respondent for his or her current job, Table 6.19 shows that gender differences are not significant; however, there are differences by educational attainment groups. From 3 to 4 in 10 of all educational attainment groups most frequently mentioned "personality." Three in 10 of the two post-secondary graduate groups, but from 1 to 2 in 10 of the other two educational levels indicated "educational qualifications." While only 14.2% of university graduates mentioned "qualifications obtained elsewhere," from 2 to almost 3 in 10 of the other groups gave this reason first importance.

Table 6.20 shows the opinions of our respondents regarding the relationship of their current jobs and educational backgrounds. The data are presented by occupational strata[15] by educational achievement for men and women separately. For men, 6 in 10 university and CAAT graduates holding upper level white-collar jobs perceived a match between their educations and current jobs. Two in 10 university men in clerical and sales work or in blue-collar jobs perceived a close match of education to job. However, half of the CAAT graduate men working in blue-collar jobs felt their jobs matched their training. Only 16%-26% of men with some university and/or CAAT saw their jobs as matching their education; this group least often perceived a close fit between education and work. Of men with high school only, 15% in clerical and sales employment and 3 in 10 in blue-collar employment perceived that their jobs matched their training; implicitly, such low proportions do not speak well of their high school preparation.

Six in 10 women university graduates in upper-level white-collar work perceived a match between job and education, but only 3 in 10 university women in clerical and sales work perceived such a fit. Half of women CAAT graduates in clerical and sales work, and 85.7% in upper-level white-collar jobs felt that their jobs matched their training. One-third of women with some university and/or CAAT experience or high school only believed that their jobs in clerical and sales work matched their education.

In summary, our respondents appear to have definite opinions about how well their current jobs match their educational achievement. Considering response alternatives "very true" or "true" to item C.15H as indications of a match between education and job, 53.6% of university graduate men believe their education does not match their job; of university graduate women, 58.0% perceived a lack of fit. For men and women CAAT graduates, the corresponding figures are 49.7% and 31.0%, respectively.

These beliefs may be taken as a subjective expression of underemployment. Comparing these results with the GED determined rates of underemployment as shown in Table 6.10 indicates that the GED rate for university men underestimates the subjective sense of job not fitting education by about 12%, but for university women the GED rate closely fits the subjective sense of job not fitting schooling. For men CAAT graduates, the GED rate (77%) estimates underemployment that is 27% higher than the rate based on subjective belief; for women CAAT graduates the GED rate (57%) of underemployment is 26% higher than the subjective sense of fit of education to job.

FOOTNOTES

1. Jane O'Hara. "The Class of '79," Maclean's. June 11, 1979, pp. 32-35.

2. Andrew Weiner. "A Matter of Degree," The Financial Post Magazine. September 1979, pp. 14-23.

3. See also "Careers and the Job Market," special report magazine supplement in The Financial Post. September 29, 1979. This report on careers indicates that university graduates in the summer of 1979 had very good employment prospects, due to a marked increase in hiring by business. It notes that arts graduates still fared least well of all degree holders.

4. Page 8 in Horizons is an annual publication of the Ontario Ministry of Colleges and Universities. Interestingly enough, while the mandate of CAATs is described in the 1979-80 issue, nothing is said about the goals of university education. Since each Ontario university describes itself and its offerings, some functions of universities are implicitly indicated. Also, while CAATs are described in vocational terms, little mention is made of the fact that all community colleges, in varying degrees, require liberal arts courses for certificate and diploma students; many courses in English literature, Canadian studies, psychology, sociology, philosophy, and other arts areas are available.

5. Horace D. Beach. Education and Employment of Youth: A Background Paper. Victoria, B.C.: Department of Economics, University of Victoria, 1978, p. 41. The percentages cited refer to September 1974, and to one year later; they were taken from Z. Zsigmond, G. Picot, H. S. Devereaux, and W. Clark Future Trends in Enrolment and Manpower Supply in Ontario. Ottawa: Statistics Canada, April 1977.

6. Ibid. p. 39. The underemployment rate of Ontario CAAT students was 20% for September 1974 (following spring 1974 graduation), and still 19% one year later; the corresponding rates for university graduates were 17% and 11%, respectively. The data are from Zsigmond et al., as cited in footnote 5 above.

7. These latter more detailed occupations grouped under chemist appear in, Dominion Bureau of Statistics, Occupational Classification Manual, Census of Canada, 1971, published in 1971, cat. no. 12-537; the 500 unit groups represent over 10,000 occupations that exist in the Canadian economy today.

8. Bernard R. Blishen and Hugh McRoberts. "A Revised Socio-economic Index for Occupations in Canada", Canadian Review of Sociology and Anthropology, 13. 1976, pp. 71-79.

9. Bernard R. Pineo and John Porter. "Occupational Prestige in Canada", Canadian Review of Sociology and Anthropology, 4. 1967, p. 28.

304

10. Bernard R. Blishen and William K. Carroll. "Sex Differences in a Socio-economic Index for Occupations in Canada", Canadian Review of Sociology and Anthropology, 15. 1978, pp. 352-371.

11. A rigorous test of the attenuation of SES in relation to occupational career beginnings due to the mediation of schooling would be shown in a table cross-tabulating current job by SES controlling for educational attainment. Table 6.6 shows such a cross-tabulation; it reveals weak SES differences by occupational stratum within educational attainment categories, but strong differences across educational achievement groups. The upper white-collar occupational stratum includes the Statistics Canada categories: managers and administrators; natural science, engineering, mathematics; religion; teaching; medicine and health; and artistic, literary, recreational, and related occupations. The blue-collar occupational stratum includes all other Statistics Canada categories (except, of course, the clerical and sales categories), including service workers, farmers, and occupations not elsewhere classified.

12. Ottawa: Information Canada, 1974.

13. The specific GED levels reported in the CCDO for occupations are as follows: (1) up to 6 years; (2) 6 to 8 years; (3) 9 to 10 years; (4) 11 to 12 years; (5) 13 to 16 years; and, (6) 17 years plus.

14. We have not included individuals with only some CAAT and/or university in this part of the analysis since the evaluation of post-secondary education for them could not be referred separately to a CAAT or a university experience.

15. The occupational strata employed are described in the latter part of footnote 11.

TABLE 6.1: TOTAL NUMBER OF FULL-TIME JOBS BY JOB-CHANGING STATUS

	Job-Changing Status									
Total Number Of Full-Time Jobs[a]	Never Worked Men (%)	Never Worked Women (%)	No Current Full-time Job Men (%)	No Current Full-time Job Women (%)	Current Job Different From First Men (%)	Current Job Different From First Women (%)	Current Job Same As First Men (%)	Current Job Same As First Women (%)	Total Men (%)	Total Women (%)
None	100.0	100.0	9.3[b]	8.1[b]					12.4	13.3
One			34.5	39.6			100.0	100.0	37.0	38.1
Two			26.1	35.9	48.4	49.1			24.7	26.5
Three			13.2	9.7	25.7	30.4			12.7	13.1
Four			15.5	5.6	15.7	13.6			8.5	6.2
Five			1.4	1.1	8.7	6.3			4.0	2.5
Six			0.0	0.0	0.6	0.0			0.3	0.0
Seven			0.0	0.0	0.9	0.7			0.4	0.2
TOTAL (N)	83	91	69	186	324	285	249	234	724	795
Significance (p)		-						-	(See note)	

Note: Job-changing status was determined on the basis of items A.1, C.1, C.19, and C.22. Statistical significance is based on comparing the categories "no current full-time job" with "current job different from first" for men and women separately. All men/women comparisons are not statistically significant.

[a] - Total number of full-time jobs including first full-time job.

[b] - Indicated on item C.19 that they once had a full-time job but the information in the job history table, (C.22), was not sufficient to establish the number of such jobs.

TABLE 6.2: DURATION OF FIRST AND CURRENT JOB BY EDUCATIONAL ATTAINMENT AND JOB-CHANGING STATUS

Duration In Months	Total		Educational Achievement				Job Changing Status	
	Men (%)	Women (%)	University Graduates (%)	CAAT Grad (%)	Some Univ/ CAAT (%)	High School Only (%)	Current Job Different From First (%)	Current Job Same As First (%)
First Full-time Job								
1-6	33.0	22.5	38.5	27.9	28.8	22.6		
7-12(1 year)[a]	26.9	29.4	38.0	23.1	34.6	24.8		
13-18	13.4	18.1	13.8	22.9	12.2	15.0		
19-24(2 years)	7.0	7.3	4.1	7.2	8.0	7.8		
25-30	6.8	6.3	2.8	8.3	5.3	7.5		
31-36(3 years)	4.5	4.8	1.3	4.0	4.2	6.3		
37-42	1.9	3.9	0.7	3.3	0.5	4.7		
43-48(4 years)	2.6	3.3	0.0	0.0	4.2	4.8		
49-60(5 years)	3.3	2.2	0.9	2.5	1.7	3.8		
61-72(6 years)	0.8	2.1	0.0	0.9	0.5	2.7		
TOTAL (N)	361	427	124	162	142	360		
Significance (p)	0.07							
Current Full-time Job								
1-6	21.8	14.3	34.1	12.9	19.1	11.0	22.8	12.6
7-12(1 year)[b]	13.1	18.3	29.8	13.9	12.2	8.9	16.0	15.1
13-18	13.2	12.1	20.7	9.4	16.0	8.2	11.4	14.2
19-24(2 years)	7.6	9.9	7.2	11.3	13.2	6.5	10.3	6.6
25-30	8.1	8.8	5.6	12.9	13.0	6.0	9.9	6.6
31-36(3 years)	5.6	10.2	1.1	13.9	8.0	8.6	9.8	5.4
37-42	5.5	4.0	0.6	9.5	4.3	4.9	4.6	4.9
43-48(4 years)	3.3	3.1	0.0	5.1	2.4	4.4	3.7	2.5
49-54	3.8	3.3	0.9	5.2	3.7	4.1	3.5	3.5
55-60(5 years)	4.1	5.0	0.0	2.9	3.0	8.8	3.4	5.9
61-66	4.8	3.9	0.0	1.9	2.2	9.3	3.0	6.1
67-72(6 years)	5.6	4.4	0.0	0.7	1.4	11.9	1.4	9.6
73-90	3.5	2.8	0.0	0.4	1.6	7.3	0.2	6.9
TOTAL (N)	564	512	265	234	155	422	598	477
Significance (p)	0.01							

Note: Cases for which there is missing data are excluded from this table.

[a] - Based on computing the difference between starting and ending dates (given as month and year).

[b] - Based on using employment during month of June, 1979 as equal to one month of job duration.

TABLE 6.3: STARTING YEAR OF FIRST AND CURRENT FULL-TIME JOBS COMPARED TO LAST YEAR OF FORMAL EDUCATION FOR PERSONS WITH SOME POST-SECONDARY EDUCATION

Kind Of Post-Secondary Education	Began Job Before Completion Year (%)	Began Job In Completion Year (%)	Began Job After Completion Year (%)	Total (N)
First Jobs				
University degree	27.1	64.2	8.7	321
CAAT diploma/certificate	34.1	52.8	13.1	267
Some university and/or CAAT	52.0	31.7	16.3	202
TOTAL	35.8	52.0	12.2	790
Current Jobs				
University degree	10.2	63.3	26.5	264
CAAT diploma/certificate	13.3	43.3	43.3	233
Some university and/or CAAT	20.3	33.5	46.2	158
TOTAL	13.7	49.0	37.3	655

Note: Completion year is the nearest year to 1979, after which no further record of post-secondary education is given in questionnaire item B.1.

TABLE 6.4: FIRST FULL-TIME OCCUPATIONS BY SES, STRATUM, AND EDUCATIONAL ATTAINMENT FOR MEN AND WOMEN (INCLUDING BLISHEN SCORES)

Statistics Canada Occupational Category	Total Men	SES Low	SES High	Stratum Urban (1,2,3)	Stratum Rural	Educational Achievement 1979 University Grad	CAAT Grad	Some Univ/ CAAT	No Post-Secondary
Men									
Man. admin. & related	6.1	6.8	5.6	6.6	5.4	12.5	7.7	3.4	3.0
Nat. sci., eng., math	10.0	7.7	12.9	11.7	7.3	23.4	16.6	4.6	1.9
Social sci. and rel.	0.9	0.6	1.0	0.3	1.8	1.9	1.4	0.0	0.4
Religion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Teaching & related	0.9	0.5	1.3	0.7	1.2	2.2	0.0	1.0	0.3
Medicine & health	1.6	1.7	1.7	1.7	1.5	1.7	2.2	0.8	1.7
Art., lit., recreat.	2.2	2.0	2.3	2.7	1.4	4.3	2.7	2.5	0.6
Clerical and rel.	10.6	9.4	11.5	12.8	7.0	14.8	10.6	12.6	7.3
Sales	13.0	9.9	17.2	14.5	10.5	12.9	13.6	19.7	9.9
Service	5.9	5.8	5.3	7.0	3.9	3.5	7.5	6.5	6.4
Farm. hort. anim. husb.	3.9	4.7	3.0	1.5	8.0	3.4	1.5	2.8	5.6
Fishing, hunt., trap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forestry & logging	0.3	0.4	0.2	0.0	0.8	0.0	0.7	1.1	0.0
Mining, inc. oil & gas	1.2	1.1	1.3	1.4	0.8	1.0	0.0	0.8	1.9
Processing	5.2	6.2	3.3	5.1	5.4	3.6	4.1	1.8	8.1
Machining & rel.	4.0	5.0	2.3	2.9	5.7	1.2	3.2	4.3	5.7
Product fab. assemb.	11.9	14.2	10.5	10.3	14.7	2.1	12.7	12.5	17.2
Construction trades	9.5	11.8	5.9	5.8	15.5	5.0	8.6	6.3	13.8
Transport eq. oper.	4.9	6.0	3.9	5.5	4.0	3.2	1.7	3.6	7.8
Materials handl.&rel.	3.2	2.2	4.7	4.2	1.5	0.6	2.0	7.8	3.2
Oth.crafts, equip.op.	2.7	2.1	2.6	3.2	1.8	1.3	3.4	4.6	2.3
Not elsewhere	2.0	2.0	2.3	2.2	1.8	1.4	0.0	3.1	2.8
TOTAL (N)	626	323	275	392	234	153	102	111	260
Significance (p)		0.03							
Average Blishen Score	43.4	41.7	45.6	45.5	39.9	52.9	47.3	40.3	37.5
Stand. Dev of Blishen Score	13.9	13.5	14.1	13.8	13.4	14.1	13.9	11.4	11.0
Significance (p)									

TABLE 6.4 (cont'd)

Statistics Canada Occupational Category	Total Women	SES		Stratum		Educational Achievement 1979			
		Low	High	Urban (1,2,3)	Rural	University Grad	CAAT Grad	Some Univ/ CAAT	No Post-Secondary
Women									
Man. admin. & related	1.8	0.3	3.7	2.1	1.2	4.2	1.1	0.0	1.5
Nat. sci., eng., math	2.2	2.3	2.3	2.6	1.2	8.0	0.9	0.9	0.0
Social sci. and rel.	4.1	2.2	5.8	3.8	4.7	7.0	6.3	5.1	0.6
Religion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Teaching & related	3.6	2.6	3.9	2.8	5.4	9.7	5.0	0.8	0.0
Medicine & health	10.3	9.1	12.1	10.5	9.7	8.7	29.6	2.2	1.5
Art., lit., recreat.	2.3	1.1	3.8	2.6	1.8	4.0	3.1	2.2	0.9
Clerical and rel.	57.1	60.2	51.8	59.3	51.8	36.7	42.1	64.9	76.1
Sales	8.6	9.5	8.6	8.7	8.4	11.7	5.1	10.7	8.4
Service	5.3	5.2	6.0	4.6	7.0	7.7	4.5	9.2	3.1
Farm. hort. anim. husb.	0.1	0.2	0.0	0.0	0.3	0.0	0.0	0.0	0.2
Fishing, hunt., trap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forestry & logging	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Mining,inc. oil & gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Processing	0.5	0.6	0.5	0.2	1.3	0.5	0.6	0.0	0.6
Machining & rel.	0.2	0.5	0.0	0.2	0.4	0.0	0.0	0.0	0.6
Product fab. assemb.	1.5	2.3	0.6	1.0	2.8	1.2	0.4	1.5	2.5
Construction trades	0.3	0.6	0.0	0.5	0.0	0.0	0.0	1.4	0.3
Transport eq. oper.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Materials handl.&rel.	0.6	1.1	0.3	0.4	1.2	0.6	0.0	0.0	1.3
Oth.crafts, equip.op.	0.4	0.5	0.4	0.4	0.6	0.0	0.8	0.0	0.6
Not elsewhere	0.9	1.7	0.2	0.4	2.3	0.0	0.5	1.0	1.8
TOTAL (N)	688	336	318	478	210	158	173	89	268
Significance (p)				0.06					
Average Blishen Score	47.0	46.2	47.8	47.7	45.6	50.5	48.0	44.8	45.2
Stand. Dev of Blishen Score	8.9	8.8	9.2	8.4	10.0	10.8	7.4	8.5	8.1
Significance (p)									

TABLE 6.5: CURRENT FULL-TIME OCCUPATIONS BY SES, STRATUM, AND EDUCATIONAL ATTAINMENT FOR MEN AND WOMEN (INCLUDING BLISHEN SCORES)

Statistics Canada Occupational Category	Total Men	SES Low	High	Stratum Urban (1,2,3)	Rural	Educational Achievement 1979 University Grad	CAAT Grad	Some Univ/ CAAT	No Post-Secondary
Men									
Man. admin. & related	7.8	9.6	5.4	3.6	6.5	14.4	6.4	4.0	6.2
Nat. sci., eng., math	12.0	9.0	15.4	13.8	9.3	30.1	20.8	7.2	0.7
Social sci. and rel.	1.1	0.9	1.2	0.3	2.2	2.1	1.5	0.8	0.5
Religion	0.1	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.3
Teaching & related	1.3	0.8	2.1	1.4	1.2	2.5	0.8	2.8	0.3
Medicine & health	1.4	1.5	1.5	1.6	1.1	1.9	2.3	0.0	1.4
Art., lit., recreat.	3.5	2.4	4.7	4.5	2.0	6.3	5.0	5.1	0.8
Clerical and rel.	10.2	9.9	9.8	12.6	6.5	11.0	10.7	16.6	7.3
Sales	10.2	7.5	14.5	10.1	10.3	13.3	11.3	12.4	7.3
Service	4.5	4.7	4.5	5.6	2.8	4.5	4.1	3.8	5.0
Farm. hort. anim. husb.	4.0	4.0	3.4	1.1	8.4	2.8	2.5	3.0	5.5
Fishing, hunt., trap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forestry & logging	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3
Mining, inc. oil & gas	1.0	1.5	0.4	0.8	1.2	0.0	0.0	0.9	1.9
Processing	3.8	4.6	2.3	4.0	3.4	1.8	1.6	2.0	6.4
Machining & rel.	4.8	6.7	3.0	3.1	7.4	0.8	2.8	5.0	7.6
Product fab. assemb.	13.0	14.2	11.5	11.3	15.6	2.4	13.8	12.6	18.6
Construction trades	11.0	12.5	9.7	8.3	15.1	1.3	11.0	9.5	16.8
Transport eq. oper.	4.1	4.6	3.5	4.5	3.4	1.7	2.7	2.6	6.5
Materials handl.&rel.	2.7	3.2	1.9	3.7	1.1	0.0	0.0	7.9	3.3
Oth.crafts, equip.op.	2.7	1.9	3.8	3.1	2.0	1.5	2.9	2.3	3.4
Not elsewhere	0.6	0.0	1.5	1.0	0.0	1.6	0.0	1.6	0.0
TOTAL (N)	572	299	247	347	224	135	95	93	248
Significance (p)		0.01							
Average Blishen Score	47.1	45.3	49.6	49.5	43.5	57.1	51.0	43.3	41.3
Stand. Dev of Blishen Score	13.9	13.8	13.6	13.4	13.7	12.4	12.1	12.4	12.1
Significance (p)									

TABLE 6.5 (cont'd)

Statistics Canada Occupational Category	Total Women	SES Low	SES High	Stratum Urban (1,2,3)	Stratum Rural	Educational Achievement 1979 University Grad	CAAT Grad	Some Univ/ CAAT	No Post-Secondary
Women									
Man. admin. & related	2.7	1.3	4.4	2.9	2.3	4.7	1.4	2.3	2.5
Nat. sci., eng., math	3.6	2.8	4.8	4.4	1.6	10.3	1.8	2.8	0.6
Social sci. and rel.	4.4	2.8	4.8	4.1	5.0	7.4	4.8	6.1	1.4
Religion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Teaching & related	4.4	3.6	4.6	3.4	6.9	11.7	5.5	0.0	0.0
Medicine & health	12.1	11.1	13.8	12.6	11.1	9.1	33.8	2.3	1.2
Art., lit., recreat.	2.6	0.9	4.5	2.8	2.0	5.0	2.5	3.1	0.8
Clerical and rel.	57.4	63.8	50.7	57.5	57.2	37.0	38.2	69.2	82.3
Sales	3.8	4.6	3.5	4.1	3.2	5.4	3.3	6.4	2.3
Service	4.1	3.2	5.4	3.8	5.0	5.9	6.1	2.1	2.1
Farm. hort. anim. husb.	0.4	0.8	0.0	0.3	0.4	0.0	0.0	2.0	0.3
Fishing, hunt., trap.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Forestry & logging	0.2	0.0	0.3	0.2	0.0	0.6	0.0	0.0	0.0
Mining,inc. oil & gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Processing	0.3	0.4	0.3	0.2	0.6	0.6	0.0	0.0	0.5
Machining & rel.	0.3	0.3	0.0	0.5	0.0	0.0	0.0	0.0	1.0
Product fab. assemb.	1.4	2.0	0.9	1.0	2.3	1.4	0.8	1.7	1.6
Construction trades	0.4	0.9	0.0	0.6	0.0	0.0	0.0	2.0	0.5
Transport eq. oper.	0.8	0.7	1.0	1.0	0.5	1.1	0.0	0.0	1.5
Materials handl.&rel.	0.2	0.4	0.0	0.3	0.0	0.0	0.0	0.0	0.5
Oth.crafts, equip.op.	0.8	0.3	0.8	0.3	1.9	0.0	1.8	0.0	0.8
Not elsewhere	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (N)	516	242	249	368	149	130	140	62	184
Significance (p)			0.06	N.S.					
Average Blishen Score	50.0	49.5	50.4	50.5	48.6	52.8	49.7	49.3	48.4
Stand. Dev of Blishen Score	8.4	8.1	8.8	8.0	9.2	10.0	7.5	8.9	7.2
Significance (p)									

TABLE 6.6: OCCUPATIONAL STRATUM BY SES, EDUCATIONAL ACHIEVEMENT, AND SES WITH EDUCATIONAL ACHIEVEMENT CONTROLLED BY SEX

	SES		Educational Achievement 1979				SES Controlling for Educational Achievement							
							Univ Grad		CAAT Grad		Some Univ. &/or CAAT		High School Only	
Occupational Current Full-time	Low (%)	High (%)	Univ. Grad (%)	CAAT Grad (%)	Some Univ/ CAAT (%)	High School Only (%)	Low SES (%)	High SES (%)	Low SES (%)	High SES (%)	Low SES (%)	High SES (%)	Low SES (%)	High SES (%)
Men														
Upper white-collar	24.6	30.2	57.4	35.9	19.8	10.2	60.2	55.1	33.7	43.2	21.4	16.5	10.5	8.3
Clerical and sales	17.5	24.3	24.3	19.6	28.9	14.6	27.0	23.2	17.9	22.5	34.1	28.7	10.3	23.4
Blue-collar	57.9	45.5	18.3	44.6	51.3	75.2	12.9	21.7	48.4	34.3	44.5	54.8	79.3	68.3
TOTAL (N)	299	247	135	95	93	248	49	84	60	30	37	50	153	83
Significance (p)		.01												
Women														
Upper white-collar	22.7	36.9	48.0	49.9	16.5	6.5	45.9	47.4	50.7	49.4	13.1	21.4	1.6	16.6
Clerical and sales	68.3	54.3	42.3	41.5	75.6	84.7	46.4	41.5	46.7	36.6	71.8	75.3	86.7	80.5
Blue-collar	9.0	8.8	9.6	8.7	7.9	8.8	7.6	11.0	2.6	14.1	15.1	3.3	11.7	3.0
TOTAL (N)	242	249	130	140	62	184	37	89	65	66	26	33	115	62
Significance (p)														

Note: Occupational strata are described in footnote 11 to Chapter Six. Lower SES combines the two lower SES groups, and higher SES combines the two higher SES groups.

TABLE 6.7: PRESENT ACTIVITIES OF PERSONS NOT IN THE LABOR FORCE BY SES, STRATUM AND EDUCATIONAL ACHIEVEMENT 1979 BY SEX

	Total	SES		Stratum		Educational Achievement 1979			
Present Activity	(%)	Low (%)	High (%)	Urban (1,2,3) (%)	Rural (%)	Univ Grad (%)	CAAT Grad (%)	Some Univ/ CAAT (%)	High School Only (%)
Men									
Work part-time	12.9	13.6	11.5	12.0	18.4	7.1	27.2	6.0	48.3
Unemployed	17.4	17.6	17.0	15.4	29.2	16.7	20.4	3.1	45.2
Full-time student	64.9	63.0	66.8	67.0	52.4	71.6	52.4	81.0	6.6
Part-time student	4.8	5.8	4.7	5.6	0.0	4.7	0.0	9.9	0.0
TOTAL (N)	146	49	89	125	20	90	12	29	16
Significance (p)		N.S.		N.S.					
Women									
Work part-time	18.0	24.3	12.4	16.7	20.6	11.7	36.9	9.8	19.6
Unemployed	15.8	16.2	15.7	14.7	17.9	15.1	23.1	10.5	15.5
Full-time student	29.4	15.5	40.7	35.9	16.2	63.7	7.6	35.9	2.1
Part-time student	5.0	4.4	6.1	6.3	2.3	7.4	1.8	10.0	1.9
Housewife	32.2	39.7	25.2	26.3	43.0	3.1	30.6	33.8	60.9
TOTAL (N)	273	132	128	183	91	99	40	36	97
Significance (p)									

Note: Based on item A.1. Housewives with part-time jobs were classed as part-time workers; housewives who were unemployed were classed as unemployed; persons who were part-time workers or housewives and full-time students were classed as full-time students; persons who were part-time workers, unemployed or housewives and were part-time students are classed as part-time students.

TABLE 6.8: AVERAGE BLISHEN SCORES, STARTING PAY, AND CURRENT PAY FOR FIRST AND CURRENT FULL-TIME JOBS BY EDUCATIONAL ACHIEVEMENT BY SEX

Educational Achievement, 1979

	University Graduate			CATT Graduate			Some University &/or CATT			High School Only			Total			Statistical Significance
	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	
Blishen Score, First Job																
Men	52.88	14.15	153	47.32	13.87	102	40.33	11.43	111	37.52	11.03	260	43.38	13.92	626	
Women	50.45	10.75	158	47.99	7.45	173	44.82	8.49	89	45.16	8.06	268	47.04	8.93	688	
Starting Salary, First Job																
Men	11572	3664	143	9141	2539	88	8723	3155	102	7576	2868	234	9007	3481	567	
Women	9010	3204	145	7935	3301	151	6480	1938	80	5548	2067	216	7132	3054	593	
Blishen Score, Current Job																
Men	57.15	12.40	135	51.04	12.07	95	44.34	12.37	93	41.26	12.06	248	47.14	13.80	572	
Women	52.83	9.97	130	49.65	7.51	140	49.32	8.86	82	48.41	7.21	184	49.97	8.42	516	
Starting Salary, Current Job																
Men	12487	3164	127	11212	3668	88	10486	3425	85	10273	4834	233	10989	4174	532	
Women	10127	3250	127	9364	3567	137	8155	2193	60	7385	2564	165	8749	3216	489	
Present Salary, Current Job																
Men	13819	3799	128	14633	4521	89	13723	4011	86	15216	6586	6	14548	5352	539	
Women	11281	3211	127	11998	3856	137	10602	2323	60	10646	2560	170	11179	3156	494	

Note: All pay figures supplied by respondents were converted into an annual salary based on the assumption of full-time, full-year employment. S.D. refers to the standard deviation of the mean.

TABLE 6.9: AVERAGE STARTING PAY AND CURRENT PAY FOR FIRST AND CURRENT FULL-TIME JOBS FOR YEAR OF JOB START BY EDUCATIONAL ACHIEVEMENT 1979

	Educational Achievement 1979												
	University Graduate			CAAT Graduate			Some University			High School Only			Statistical
Year of Job Start	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	Significance
Starting Salary, First Job													
Men													
1971-72-73		b			b			b		6883	2509	(130)	
1974-75		b		8084	2196	(33)	7984	2125	(41)	7913	2661	(78)	
1976-77	9979	2445	(24)	9814	2377	(33)	10311	3581	(35)		b		
1978-79	12627	3364	(104)		b			b			b		
Women													
1971-72-73		b			b			b		5160	1990	(127)	
1974-75		b		6588	2219	(62)	6057	1187	(43)	6035	2103	(72)	
1976-77	8757	2447	(48)	9120	3424	(66)		b			b		
1978-79	9950	3281	(80)		b			b			b		
Starting Salary, Current Job													
Men													
1971-72-73		a			b			b		7009	2906	(45)	
1974-75		b			b			b		9140	4398	(67)	
1976-77		b		10494	2983	(42)	10670	2983	(31)	10584	3083	(59)	
1978-79	12757	3152	(114)	12645	4125	(33)	10729	3827	(45)	13530	5702	(62)	
Women													
1971-72-73		a			b			b		5377	1668	(29)	
1974-75		b			b			b		6328	1774	(40)	
1976-77	10690	3250	(26)	9318	3503	(65)	8102	2127	(25)	7957	2659	(46)	
1978-79	10064	3228	(100)	10724	3616	(49)	9044	2107	(24)	8866	2385	(49)	

TABLE 6.9 (cont'd)

Educational Achievement 1979

Year of Job Start	University Graduate			CATT Graduate			Some University			High School Only			Statistical Significance
	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	Average	S.D.	(N)	
Present Salary, Current Job													
Men													
1971-72-73		a			b			b		14801	4238	(48)	
1974-75		b			b			b		16202	10004	(67)	
1976-77		b		14689	3962	(43)	14201	3222	(33)	14914	3522	(57)	
1978-79	13821	3894	(116)	13930	4961	(33)	12894	4235	(45)	14766	5601	(63)	
Women													
1971-72-73		a			b			b		11498	1936	(31)	
1974-75		b			b			b		11024	2222	(40)	
1976-77	13240	3752	(26)	12526	4321	(65)	10850	1941	(25)	10188	2812	(47)	
1978-79	10852	2858	(100)	11485	3613	(49)	10193	2875	(24)	10224	2744	(52)	

Note: All pay figures supplied by respondents were converted into an annual salary based on the assumption of full-time, full-year employment; S.D. refers to the standard deviation of the mean.

[a] - No cases

[b] - Less than 25 cases

TABLE 6.10: UNDEREMPLOYMENT OF UNIVERSITY AND CAAT GRADUATES WITH RESPECT TO FIRST AND CURRENT FULL-TIME JOBS, USING ESTIMATED GED LEVELS OF THESE OCCUPATIONS

Type of Post-secondary Graduation	Percent in Jobs with Average GED[a] Levels Requiring:				Percent of Occupations With Average GED Levels Known	
	Post-Secondary Education (%)	High School Education (%)	Less Than Grade 9 (%)	Total (N)	(%)	(N)
University						
Men						
First full-time job	46.3	45.6	8.1	155	83.5	(85)
Current full-time job	58.0	40.3	1.7	137	83.8	(68)
Women						
First full-time job	36.7	50.0	13.3	150	90.8	(65)
Current full-time job	43.9	51.2	4.9	123	89.3	(56)
CAAT						
Men						
First full-time job	21.9	63.5	14.6	96	89.2	(65)
Current full-time job	23.3	73.3	3.5	86	86.4	(59)
Women						
First full-time job	34.3	60.4	5.3	169	93.3	(45)
Current full-time job	42.8	56.5	0.7	138	97.6	(42)

[a] - GED refers to level of general educational development as defined in the *Canadian Classification and Dictionary of Occupations, 1971*: see the text for a discussion of the use of this measure.

TABLE 6.11: BLISHEN SCORES AND CURRENT PAY BEFORE TAXES IN CATEGORIES BY EDUCATIONAL ACHIEVEMENT, BY SEX

	Educational Achievement 1979							
	University Graduate		CAAT Graduate		Some University/ CAAT		High School Only	
	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
Blishen Score Categories								
29 or less[a]	5.6	4.5	4.8	0.6	15.2	5.9	15.0	2.6
30-39	4.4	4.3	18.7	11.7	25.3	2.3	34.3	7.2
40-49	13.1	20.8	19.4	22.1	23.4	29.0	27.5	33.3
50-59	23.4	45.0	20.4	59.4	21.1	52.8	13.5	52.0
60 and above	53.4	25.3	36.7	6.2	15.0	10.0	9.6	4.9
TOTAL (N)	135	130	95	140	93	62	248	184
Significance (p)								
Annual Current Pay Before Taxes								
$ 1,200- 9,996	11.1	34.9	10.1	32.7	15.8	43.2	10.1	38.2
$ 9,997-12,272	26.2	32.5	21.7	28.0	21.2	35.7	14.7	38.0
$12,273-14,957	24.9	18.5	27.3	19.1	27.9	17.9	30.3	20.2
$14,958-37,201	37.3	14.1	40.9	20.2	35.1	3.2	44.9	3.5
TOTAL (N)	128	127	89	137	86	60	235	170
Significance (p)	N.S.							

Note: The subtable current pay by educational achievement for men is nonsignificant, but for women the corresponding subtable is statistically significant. All men/women comparisons in both parts of the table are statistically significant.

[a] - A low score refers to low occupational prestige.

TABLE 6.12: GENERAL AND JOB-RELATED USEFULNESS OF EDUCATION BY LAST INSTITUTION ATTENDED BY SEX

	Last Institution Attended					
	University		CAAT		High School	
Usefulness of Education	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
General Usefulness						
Very useful	33.3	43.7	28.7	33.8	12.5	16.4
Frequently useful	29.3	24.9	19.1	28.9	28.0	27.2
Occasionally useful	19.9	17.1	26.2	19.4	20.8	23.1
Rarely or not all useful	17.5	14.3	26.0	17.9	38.7	33.3
TOTAL (N)	283	265	170	233	265	282
Significance (p)						
Job-Related Usefulness						
Very useful	25.0	19.5	31.1	43.7	21.0	24.9
Frequently useful	29.3	25.9	26.9	27.7	17.4	22.5
Occasionally useful	21.8	30.0	20.5	13.4	19.9	24.1
Rarely or not all useful	23.9	24.6	21.5	15.2	41.6	28.5
TOTAL (N)	283	265	170	233	266	282
Significance (p)						

Note: Statistical significance is based on the subtables general usefulness by last institution attended for men and women separately and job-related usefulness by last institution attended for men and women separately. Men/women comparisons are generally nonsignificant except for the following comparisons: for general usefulness CAAT students, 0.02; for job-related usefulness CAAT students, 0.03; and high school only students, 0.01.

TABLE 6.13: EVALUATION OF UNIVERSITY OR CAAT EXPERIENCE AS RELATED TO WORK OBTAINED AFTER LEAVING POST-SECONDARY EDUCATION

	Post-Secondary Enrollment		
Evaluation	University Enrollment (%)		CAAT Enrollment (%)
Courses in Major Field or Specialization			
Very valuable[a]	49.2		71.8
Somewhat valuable	20.2		39.5
Not valuable[b]	30.5		13.1
TOTAL (N)	242		212
Significance (p)			
Courses Outside Major or Specialization			
Very valuable	16.7		18.4
Somewhat valuable	35.2		39.5
Not valuable	48.1		42.1
TOTAL (N)	240		205
Significance (p)		N.S.	
Friendships/Contacts With Other Students			
Very valuable	25.9		26.0
Somewhat valuable	30.3		31.3
Not valuable	43.8		42.6
TOTAL (N)	239		208
Significance (p)		N.S.	
Relationships With Particular Faculty Members			
Very valuable	15.6		18.4
Somewhat valuable	19.8		25.3
Not valuable	64.6		56.3
TOTAL (N)	237		205
Significance (p)		N.S.	

TABLE 6.13: (cont'd)

	Post-Secondary Enrollment	
Evaluation	University Enrollment (%)	CAAT Enrollment (%)
Extracurricular Activities		
Very valuable	17.2	7.1
Somewhat valuable	19.1	13.0
Not valuable	63.7	79.9
TOTAL (N)	237	203
Significance (p)		

Note: This table only includes cases where first full-time job began in last year of post-secondary education or later. The relevant items are B.18A through B.18E.

[a] - Includes the response alternatives "very valuable" and "valuable".

[b] - Includes the response alternatives "not very valuable" and not all valuable".

TABLE 6.14: EVALUATION OF COURSES IN MAJOR BY POST-SECONDARY ENROLLMENT, DEGREE COMPLETION, AND ENROLLMENT BY SEX

Evaluation of Courses in Major or Specialization For Work After University or CAAT	Post-Secondary Enrollment			
	University Enrollment (%)		CAAT Enrollment (%)	
	Did not complete	Completed	Did not Complete	Completed
By Degree Completion				
Very valuable[a]	27.6	52.7	38.5	82.2
Somewhat valuable	22.3	19.9	22.8	12.7
Not valuable[b]	50.2	27.5	38.8	5.1
TOTAL (N)	33	209	50	162
Significance (p)		0.01		
	B or Higher	C, D or F	B or Higher	C, D or F
By Post-Secondary Cumulative GPA[c]				
Very valuable	55.1	36.1	79.4	48.0
Somewhat valuable	21.8	15.1	11.6	26.8
Not valuable	23.1	48.7	9.0	25.2
TOTAL (N)	169	71	159	50
Significance (p)				
	Men	Women	Men	Women
By Enrollment and Sex				
Very valuable	50.0	48.5	61.1	77.7
Somewhat valuable	19.1	21.4	24.3	10.0
Not valuable	30.9	30.1	14.6	12.3
TOTAL (N)	127	115	75	137
Significance (p)		N.S.		0.01

Note: The relevant item is B.15A only. This table includes only cases where first full-time job began last year of post-secondary education or later.

[a] - Includes the response alternatives "very valuable" and "valuable".

[b] - Includes the response alternatives "not very valuable" and "not all valuable".

[c] - CPA refers to grade point average.

TABLE 6.15: CONCERN THAT FIRST JOB RELATED TO POST-SECONDARY EDUCATION, AND EXTENT OF SUCH RELATIONSHIP BY POST-SECONDARY EDUCATIONAL ACHIEVEMENT 1979, BY SEX

	Educational Achievement 1979					
	University Graduate		CAAT Graduate		Some University/ CAAT	
	Men (%)	Women (%)	Men (%)	Women (%)	Men (%)	Women (%)
Concern That First Full-Time Job Related to Program						
Very much concerned	37.9	46.6	54.0	66.3	18.5	22.2
Concerned	33.5	28.9	26.9	21.3	24.9	16.1
Not concerned[a]	28.6	24.5	19.0	12.5	56.6	61.7
TOTAL (N)	139	150	96	161	95	78
Significance (p)						
Extent to Which First Full-Time Job Related to Education						
Very close, or closely related	48.8	47.2	64.9	74.9	24.7	31.0
Somewhat related or not related[b]	51.2	52.8	35.1	25.1	75.3	69.0
TOTAL (N)	138	150	96	160	95	78
Significance (p)						

Note: Statistical significance is based on subtables concern or extent by educational achievement for men and women separately. All men/women comparisons are nonsignificant.

[a] - Includes response alternatives "did not care either way", "not too concerned", and "not at all concerned".

[b] - Includes response alternatives "somewhat related", "not too related", and "not at all related".

Table 6.16: FIRST BY SECOND MOST IMPORTANT REASONS PERCEIVED BY RESPONDENTS AS THE BASIS EMPLOYERS USED TO HIRE THEM FOR FIRST FULL-TIME JOBS FOLLOWING EDUCATION

	Second Most Important Reason: Row Percentage						
First Most Important Reason	Personality (%)	Educational Qualifications (%)	Qualifications Obtained Elsewhere (%)	Connections (%)	Other (%)	Total (%)	Total (N)
Personality[a]	--	56.0	14.9	10.1	19.0	39.0	268
Educational qualifications[b]	69.7	--	4.8	9.0	16.5	27.3	188
Qualifications obtained elsewhere	42.4	25.8	--	29.7	12.1	9.6	66
Connections[c]	40.2	34.1	12.2	--	13.4	11.9	82
Other	44.0	39.3	7.1	9.5	--	12.2	84
TOTAL (%)	33.3	33.1	9.4	14.7			
(N)	229	228	65	101			688

Note: This table includes all individuals with high school only and only those with post-secondary experience whose first full-time job began during their last year of study or later. Also included are those whose current job is the first job.

[a] - Refers to the response category "personality or how you presented yourself".

[b] - Includes all response alternatives in C.27 referring to educational qualifications.

[c] - Includes responses "your relationship to a friend connected with the employer" and "your relationship to an influential relative".

TABLE 6.17: FIRST MOST IMPORTANT REASON PERCEIVED BY RESPONDENTS AS THE BASIS EMPLOYERS USED TO HIRE THEM FOR FIRST FULL-TIME JOB BY SEX AND EDUCATIONAL ACHIEVEMENT

First Most Important Reason	Sex		Educational Achievement 1979			
	Men (%)	Women (%)	University Graduate (%)	CAAT Graduate (%)	Some University/ CAAT (%)	High School Only (%)
Personality	31.7	36.8	39.3	31.3	35.4	33.1
Educational qualifications	20.0	28.3	31.3	39.9	24.9	16.1
Qualifications obtained elsewhere	14.8	10.5	12.8	9.7	12.4	13.3
Connections	15.9	9.9	5.7	10.2	14.8	16.3
Others	17.5	14.6	10.9	8.9	12.5	21.2
TOTAL (N)	439	510	216	165	87	481
Significance (p)						

Note: The note and footnotes to Table 6.15 also apply to this table.

Table 6.18: FIRST BY SECOND MOST IMPORTANT REASONS PERCEIVED BY RESPONDENTS AS THE BASIS EMPLOYERS USED TO HIRE THEM FOR CURRENT FULL-TIME JOBS FOLLOWING EDUCATION

	Second Most Important Reason: Row Percentage						
First Most Important Reason	Personality (%)	Educational Qualifications (%)	Qualifications Obtained Elsewhere (%)	Connections (%)	Other (%)	Total (%)	Total (N)
Personality[a]	--	48.9	26.1	6.5	18.6	41.1	307
Educational qualifications[b]	62.6	--	16.0	7.4	14.1	21.8	163
Qualifications obtained elsewhere	55.9	18.9	--	7.7	17.5	19.1	143
Connections[c]	44.0	28.0	10.0	--	18.0	6.7	50
Other	52.4	31.0	13.1	3.6	--	11.2	84
TOTAL (%)	33.2	29.0	16.3	6.2	15.3		
(N)	248	217	122	46	114		747

Note: This table includes all individuals with high school only and only those with post-secondary experience whose current full-time job began during their last year of study or later. The relevant questionnaire item is C.13.

[a] - Refers to the response category "personality or how you presented yourself".

[b] - Includes all response alternatives in C.13 referring to educational qualifications.

[c] - Includes responses "your relationship to a friend connected with the employer" and "your relationship to an influential relative".

TABLE 6.19: FIRST MOST IMPORTANT REASON PERCEIVED BY RESPONDENTS AS THE BASIS EMPLOYERS USED TO HIRE THEM FOR CURRENT FULL-TIME JOB BY SEX AND EDUCATIONAL ACHIEVEMENT

	Sex		Educational Achievement 1979			
First Most Important Reason	Men (%)	Women (%)	University Graduate (%)	CAAT Graduate (%)	Some University/ CAAT (%)	High School Only (%)
Personality	36.8	39.5	43.0	33.8	37.1	37.6
Educational qualifications	19.5	21.4	29.6	29.4	18.9	11.6
Qualifications obtained elsewhere	21.4	21.8	14.2	18.8	25.3	26.1
Connections	8.9	5.5	6.0	8.7	9.3	6.7
Others	13.5	11.8	7.2	9.2	9.4	18.4
TOTAL (N)	493	464	235	195	118	409
Significance (p)	N.S.					

Note: The note and footnotes to Table 6.18 also apply to this table.

TABLE 6.20: PERCEIVED MATCH BETWEEN CURRENT JOB AND EDUCATIONAL BACKGROUND BY OCCUPATIONAL STRATUM CONTROLLING FOR EDUCATIONAL ACHIEVEMENT 1979, BY SEX

Job Matches Educational Background	Educational Achievement 1979											
	University Graduation			CAAT Graduation			Some University and/or CAAT			High School Only		
	Upper White Collar[a] (%)	Clerical & Sales (%)	Blue Collar (%)	Upper White Collar (%)	Clerical & Sales (%)	Blue Collar (%)	Upper White Collar (%)	Clerical & Sales (%)	Blue Collar (%)	Upper White Collar (%)	Clerical & Sales (%)	Blue Collar (%)
Men												
Very true or true	60.1	34.1	19.9	61.2	33.6	49.5	26.5	16.2	16.5	43.6	14.9	30.1
Somewhat true	20.7	21.5	17.8	24.8	40.7	22.1	40.4	8.8	19.8	12.6	28.8	28.4
Not true[b]	19.2	44.4	62.2	14.0	25.7	28.4	33.1	75.1	63.7	43.9	56.3	41.5
TOTAL (N)	75	33	24	35	21	38	17	26	44	24	36	176
Significance (p)					N.S.			0.06			N.S.	
Women												
Very true or true	56.9	26.6	30.9	85.7	51.0	58.2	54.2	26.6	25.5	19.3	34.6	6.0
Somewhat true	25.8	18.0	20.4	11.3	30.7	18.0	28.5	36.1	27.2	7.0	34.9	18.5
Not true	17.3	55.3	48.7	3.1	18.3	23.8	17.3	37.3	47.3	73.8	30.5	75.5
TOTAL (N)	62	52	13	70	58	11	10	45	5	12	154	15
Significance (p)												

[a] - For definitions of occupational strata, see footnote 11 of the text in this chapter.

[b] - Combines the response alternatives "not very true" and "not at all true". The relevant questionnaire item is C.15H.

CHAPTER SEVEN

ALTERNATIVE FORMS OF EDUCATION: PRIVATE VOCATIONAL SCHOOLS, ADULT TRAINING, APPRENTICESHIP, AND SHORT COURSES

HISTORY OF ALTERNATIVE EDUCATION

The educational system that currently exists in Ontario is diverse in both scope and function. There are twenty-two community colleges with a total of more than ninety campuses serving all the major economic regions of Ontario. In 1979-80 there was a total enrollment of 92,430 full-time students in the community college system. The number of part-time registrations is 216,514. Together, community colleges offer over 2,000 programs in major divisions such as applied arts, business, health sciences, technology, extension, or retraining.[1] Certification ranges from one-year certificates to two- and three-year diplomas. In addition, apprenticeship, which normally leads to journeyman status, takes a minimum of four years. Numerous adult training programs are also offered through the colleges; they are part of a cooperative venture by federal and provincial governments, planned in consultation with business and industry. The basic objective of this program is to qualify adults for reemployment through basic academic upgrading or through technical and commercial courses. In 1979-80 there were 18,649 students involved in adult training programs administered by community colleges.

Another educational program in Ontario involves apprenticeship, one of the world's oldest formal learning systems. The Industrial Training

Branch (formerly Apprenticeship Branch) of the Ministry of Colleges and Universities administers such programs, and in the last decade has witnessed a modest growth in enrollments. Thus, in 1968-69 there were 17,490 people actively enrolled; ten years later the number had increased to 30,148.

Although universities and colleges offer a wide range of training opportunities for young people and adults, students seeking a quick and direct means of training for employment may turn to private vocational schools. In overall time required, private vocational schools offer courses that are usually shorter than other post-secondary ones because of their concentration on teaching only job-related skills. Unlike universities and colleges, registered private vocational schools operate as private profit-making organizations and receive no subsidization from the provincial government. The growing popularity of these schools can be documented by realizing that, in 1974-75 (the first year in which private vocational schools were required to be registered), 19,366 students were enrolled; four years later in 1978-79 the number had increased to 89,780.

Continuing Education or Extension Divisions provide members of the Ontario community with an opportunity to participate in adult learning experiences. Short courses are frequently offered at times and places that are generally convenient, and have become increasingly popular among the adult population. Paid educational leaves operated through labor unions are also gaining in acceptance, as in the Ontario auto industry.

A number of intriguing questions are suggested through the recognition of an increased diversity in the educational programs available in Ontario. With respect to our sample we may ask: what proportion of people became involved after high school in private vocational schools, adult training, apprenticeship programs, or short courses? How did people learn of these programs? Were the sources substantially different? What are the similarities and/or differences, with respect to socioeconomic background and high school experiences, for people who selected alternative educational programs? Finally, what are the consequences (e.g., current job prestige, salary) of participating in alternative educational programs? In earlier chapters we have described individuals who did not go to colleges and universities as belonging to the "no entry" group or the "no post-secondary" group. This chapter will show that many of these persons, as well as others with college and university educations, often participated in these alternative forms of education which, strictly speaking, are also post-secondary.

PARTICIPATION AND SOURCES

Table 7.1 indicates that since high school, more than 4 in 10 respondents participated in at least one alternative educational program. Of those, nearly 6 in 10 were enrolled in short courses and approximately 2 in 10 participated in either adult training or apprenticeship programs. Nearly 2 in 10 participated in two or more such programs involving some combination of short courses, adult training, or apprenticeship.

People who participated in alternative programs were asked to explain how they learned of them. Table 7.2 illustrates their responses. Two-thirds identified five (of twelve possibilities) distinct sources. These include, in decreasing order of importance: employer, newspaper ads, advice of friends, mailed flyers, and school calendars. Table 7.3 indicates that nearly 5 in 10 people who subsequently participated in adult training programs most likely learned about them through work-related sources and Canada Manpower. Of those who enrolled in private schools, nearly 7 in 10 learned about them from friends or school-related sources (e.g., school calendars, fellow students). With respect to apprenticeship and short courses, learning sources seem fairly evenly divided between work, Manpower, friends, and school.

Alternative Education: A Description of Participants

Insofar as private vocational schools, adult training, and apprenticeship programs have job training or retraining as a common objective, one might hypothesize that the socioeconomic backgrounds and high school experiences of those who enroll would be essentially similar. This is not at all the case. In developing a profile of those choosing alternative educational programs, we have emphasized six dimensions: SES, stratum, gender, high school grades and performance, as well as the formal level of education achieved at the time of this study.

An examination of Table 7.4 reveals that a disproportionate number (over 6 in 10) of respondents who enrolled in either private vocational schools or adult training programs have lower socioeconomic backgrounds. Less than 6 in 10 who enrolled in apprenticeship and approximately 5 in 10 who completed short courses also have lower SES backgrounds. Thus, private vocational schools, adult training programs, and apprenticeship programs disproportionately select their recruits from among the lower SES sectors of Ontario society.

Table 7.5 indicates that proportionately more people who enroll in private vocational schools originally lived in large or middle-sized cities and towns; a disproportionate number of people enrolling in adult training or apprenticeship programs originally lived in the more rural areas of the province. This is especially true of apprenticeship programs, with over 7 in 10 coming from towns or smaller rural areas.

Gender differences, as revealed by Table 7.6, are also marked. Although apprenticeship programs are open to both men and women, virtually 9 in 10 respondents who entered were male. On the other hand, 6 in 10 enrolling in short courses were women. Very slight gender variations are revealed when private vocational schools and adult training programs are examined.

The high school program choices of those who enrolled in various alternative education programs differ markedly, as illustrated in Table 7.7. While less than 5 in 10 who enrolled in apprenticeship programs had selected academic programs in high school, those enrolling in private vocational schools, adult training programs, or short courses were much more likely to have chosen academic rather than vocational or technical programs. Being located in an academic track, however, does not insure good secondary school grades, as indicated by Table 7.8. In general, most students who participated in these alternative forms of education did only moderately well in high school. Approximately 7 in 10 respondents who subsequently enrolled in private vocational schools, adult training programs, or apprenticeship programs obtained lower than

70% grade averages. The exceptions are people choosing short courses; over 4 in 10 achieved grade averages of 70% or higher in Grade 11.

Involvement in alternative educational programs, as we have already noted, does not preclude enrollment in more traditional forms of post-secondary education. Although it is true that proportionately fewer people than the sample average participating in alternative educational programs also enrolled in universities or community colleges, the proportion that enrolled in both streams, as illustrated by Table 7.9, is surprisingly large. Over 5 in 10 who participated in private vocational schools or adult training programs were, at some time, enrolled in universities or colleges. Well over 3 in 10 of these received university degrees or community college diplomas or certificates. Slightly fewer than 4 in 10 in apprenticeship programs had also been students in the more traditional post-secondary programs and nearly 3 in 10 graduated from either universities or CAATs. Respondents in short courses had most contact with post-secondary education, over 6 in 10 being enrolled at some time in universities or CAATs.

CONSEQUENCES OF INVOLVEMENT IN ALTERNATIVE EUDCATIONAL PROGRAMS

Table 7.10 indicates that, although the majority of people who enrolled in alternative education are currently working full-time, variations do exist. Respondents who enrolled in private vocational school are less likely to be working full-time but more likely to be working part-time than other groups.[2] In contrast, over 8 in 10 respondents who enrolled in apprenticeship programs are currently working full-time. It is interesting to note that respondents who were involved in adult training programs have the highest unemployment rate (6.3%). Table 7.11 reveals that, generally, fewer people who enrolled in alternative educational programs (compared with all respondents) are now either full-time or part-time students. Respondents who enrolled in private vocational schools are most likely to be enrolled currently as full-time students; the opposite is true for those who enrolled in adult training programs.

In discussing the consequences of participating in work-related educational programs, it is clear that salary and job prestige are emphasized. Information regarding these consequences can be obtained by examining Table 7.12. When the average starting salaries for current jobs of people from alternative educational programs are examined, substantial differences are revealed. While the mean starting salary for current jobs was $9,916.00, salaries were $10,362 for people in apprenticeship programs, a figure clearly above the average. People in adult training programs earned $9,765 and those with private vocational school backgrounds received $9,796, figures slightly below the mean. Those who selected short courses are omitted from this analysis because many short courses are not vocationally oriented. When current salaries are examined, we find that respondents participating in apprenticeship programs are clearly in an advantageous position. The average for all people currently working full-time is $12,877.00; however, those with apprenticeship training earn $14,955.00. Respondents with private vocational school or adult training backgrounds now earn within $50.00 of the present average salary for all groups.

Although respondents who were involved in apprenticeship training presently enjoy high salaries, the prestige attached to their present work is significantly lower than that of other alternative education groups. The Blishen occupational prestige score for all those currently working is 48.4; the average score for respondents with apprenticeship training is 41.8. Respondents who participated in private vocational schools are slightly above the mean and respondents with an adult training background are below. These differences, however, are not statistically significant.

This description reveals some interesting differences among people selecting alternative educational programs. The selection of these programs does not exclude involvement in other forms of post-secondary education. Secondly, the social backgrounds, demographic characters and high school experiences of persons selecting various alternative programs differ, sometimes strongly. Thirdly, people selecting apprenticeship programs are mostly rural males with lower SES backgrounds, who place low priority on academic studies and performance. At present they occupy jobs of low prestige, yet they tend to earn very high yearly salaries. The inconsistencies reflected in this description might well serve as a source for developing a fascinating and worthwhile study.

FOOTNOTES

1. See Horizons, Ministry of Education, June 30, 1978 for a description of various post-secondary programs.

2. Employment status calculations are based on item A.1. When C.1 (another item that measures employment status) is used, one obtains slightly different results.

TABLE 7.1: PROPORTION PARTICPATING ON ALTERNATIVE FORMS OF EDUCATION

Alternative Education	Percentage
No participation	57.3
Private vocational schools only	1.6
Adult training schools only	4.1
Apprenticeship only	3.7
Short courses only	25.4
Two or more alternative forms	7.9
	100.0%
TOTAL (N)	1522

TABLE 7.2: SOURCES USED IN LEARNING ABOUT ALTERNATIVE FORMS OF EDUCATION

Sources	Percentage
Supervisor at work	3.1
Fellow workers	3.6
Canada Manpower	4.0
Employer	17.0
Booklets at work	4.5
School calendars	9.0
Advice from friends	13.1
School teachers	7.4
Fellow students	1.4
Newspaper ads.	14.0
Mailed flyers	11.2
Other	11.7
	100.0%
TOTAL (N)	599

TABLE 7.3: ALTERNATIVE FORMS OF EDUCATION BY SOURCES USED IN LEARNING ABOUT THEM[a]

	Source Used		
Alternative Education	Work/manpower (%)	Friendships/school (%)	Other (%)
Private vocational school only	0.0	8.0	3.4
Adult training only	13.4	8.9	6.4
Apprenticeship only	7.2	9.1	7.6
Short courses only	60.7	55.3	64.0
Two or more alternative forms	18.7	18.7	18.6
TOTAL (N)	192	183	221
Significance (p)			

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[a] - Sources in Table 7.2 were regrouped into three subcategories; sources relating to work or manpower, sources relating to friendship or school networks, and other types of sources.

TABLE 7.4: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY SOCIOECONOMIC STATUS

	SES		
Alternative Education	Low (%)	High (%)	Total (N)
Private vocational schools	64.5	35.5	42
Adult training	60.7	39.3	131
Apprenticeship	58.8	41.2	104
Short courses	49.5	50.5	475
All respondents	50.4	49.6	1522

TABLE 7.5: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY STRATUM

	Stratum		
Alternative Education	Urban (%)	Rural (%)	Total (N)
Private vocational schools	54.1	45.9	46
Adult training	43.7	56.3	135
Apprenticeship	27.8	72.2	107
Short courses	48.9	51.1	492
All respondents	44.2	55.8	1522

TABLE 7.6: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY SEX

	Sex		
Alternative Education	Men (%)	Women (%)	Total (N)
Private vocational schools	46.8	53.2	46
Adult training	48.5	51.5	135
Apprenticeship	89.2	10.8	107
Short courses	38.6	61.4	492
All respondents	47.8	52.2	1522

TABLE 7.7: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY HIGH SCHOOL PROGRAM

	Program			
Alternative Education	Academic (%)	Commercial (%)	Technical (%)	Total (N)
Private vocational schools	73.8	11.8	14.4	46
Adult training	69.7	13.8	16.5	130
Apprenticeship	48.4	4.8	46.8	105
Short courses	69.9	17.3	12.8	486
All respondents	69.2	15.5	15.4	1522

TABLE 7.8: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY GRADE AVERAGE

Alternative Education	Grades 70% or Higher (%)	Lower Than 70% (%)	Total (N)
Private vocational schools	28.3	71.7	45
Adult training	30.1	69.9	132
Apprenticeship	27.4	72.6	106
Short courses	43.0	57.0	484
All respondents	47.8	52.2	1522

TABLE 7.9: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY EDUCATIONAL ATTAINMENT

	Educational Attainment				
Alternative Education	University Graduate (%)	CAAT Graduate (%)	Some University Some CAAT (%)	No Post-Secondary (%)	Total (N)
Private vocational schools	19.6	16.2	19.3	44.9	46
Adult training	13.5	28.7	10.8	47.0	135
Apprenticeship	10.6	17.6	11.3	60.4	107
Short courses	22.2	21.8	16.3	39.7	492
All respondents	30.2	19.0	14.7	36.2	1522

TABLE 7.10: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY PRESENT WORK STATUS

Alternative Education	Work Status Full-time (%)	Part-time (%)	Unemployed (%)	Student/ Housewife (%)	Total (N)
Private vocational schools	64.7	15.1	5.1	15.1	46
Adult training	77.0	10.4	6.3	5.7	135
Apprenticeship	86.5	5.2	3.2	5.0	107
Short courses	73.8	10.0	4.3	11.9	489
All respondents	68.9	10.2	5.2	15.7	1522

TABLE 7.11: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY PRESENT STUDENT STATUS

Alternative Education	Student Status Full-time (%)	Part-time (%)	Non student (%)	Total (N)
Private vocational schools	14.2	4.4	81.5	46
Adult training	5.0	8.7	86.4	135
Apprenticeship	7.4	4.3	88.3	107
Short courses	11.0	6.9	82.1	490
All respondents	15.1	4.8	80.1	1522

TABLE 7.12: PARTICIPATION IN ALTERNATIVE FORMS OF EDUCATION BY STARTING SALARIES, CURRENT SALARIES AND JOB PRESTIGE

	Salaries and Job Prestige		
Alternative Educational Forms	Starting Salaries	Current Salaries	Current Job Prestige
Private Vocational Schools			
Averages	9,796.5	12,830.4	50.8
Standard deviation	2,475.7	3,784.9	8.7
TOTAL (N)	28	29	30
Adult Training			
Averages	9,765.5	12,773.8	46.8
Standard deviation	3,733.1	3,868.1	12.5
TOTAL (N)	104	104	108
Apprenticeship			
Averages	10,362.7	14,955.1	41.8
Standard deviation	4,757.3	5,221.6	10.3
TOTAL (N)	84	83	91
Short Courses			
Averages	9,496.4	12,815.4	49.1
Standard deviation	3,716.8	3,767.0	10.9
TOTAL (N)	355	355	373
Significance (p)			

CHAPTER EIGHT

SPEAKING OUT: SITUATIONS AND STRATEGIES

INTRODUCTION

In this chapter eleven individuals speak fully and freely about what has happened to them since they left high school. Each interview lasted an hour or more and respondents were encouraged to bring up and develop topics. The interviews were taped and transcripts prepared. For purposes of this report, and in order to facilitate smooth reading of the transcripts, the material was reorganized and some small changes made in the text. We have tried to highlight the principle situations described in the texts, and the strategies people have brought to the conduct of their lives. The main situations are those centered on schooling, work and career, family, ethnic background, and peer groups. The situations should be approached fluidly, keeping in mind that boundaries between them are not always hard and fixed. The notion of strategy grows out of the observation that each person's interview reveals an abundance of ways in which situations are approached, handled, and shaped. In many instances respondents explicitly define their methods of doing things. Underlying our own approach is the presumption that people actively participate in shaping their lives; that they do not just respond to situations, but are actively involved in their interactions.

A set of comments is appended to each interview text. These comments summarize the text and provide reflections on it. At the end of the chapter we have selected several themes and issues arising directly from the interview texts, each of which is discussed in the light of the interview material as a whole. Thus, we focus directly on individual respondents, and consider the larger topics of this report within the context of unique and separate lives.

SPEAKING OUT

John

John is single and lives with his parents in Toronto. He works full-time as a stock clerk in a Toronto factory and part-time at a Brewer's Retail outlet. He has a three-year degree from York University, and is continuing to look for a job which he finds more suitable to his background and ambitions. He is presently enrolled in a Chartered Accountants of Ontario (CAO) course which he expects to complete in three years.

1.00 Education

1.01 I went to university hoping to get into law school, while working part-time. My major was economics. I wrote the LSATs, but they didn't come out as I had hoped; I am going to write them again. Presently I'm taking the CAO course, but I don't want three years to go to waste.

1.02 I think about my university experience and sometimes I wonder was it worth it, when you consider that there are no jobs afterwards. If I had left high school and taken the CAO course right away (I didn't know about it then . . . I guess I didn't ask about it) I probably could have been a CAO by now. I wonder about the courses in university and the ridiculous selection they give you . . . it's for the birds. I may have set my goals too high in high school, but my guidance teacher said that you got the brains, so do it. Like I said, sometimes I wonder was it worth it, but I've got the degree, and that is something no one can take away from me. But now I wonder, what good is it? With my degree it will take about three years for me to get the CAO. I realize that economic conditions aren't good. Maybe there was a better chance six or seven years ago, but now business is down and you grab what you can.

1.03 In university I thought about getting my B.A. in phys. ed. . . . but all I could do with that is be a teacher; and thinking about that, I said no, even though I'd like to help people. If I can be helpful, I'm happy.

1.04 Coming out of high school I was scared . . . coming out and listening to what people said and about university. But I knew that if I worked hard I could make it. I'll tell you, high school was the best five years of my life. If I could go back I'd do it again. It was a small school and I got to know a lot of people. There were lots of activities and my marks were pretty good. You woke up and wanted to go to school. . . . You were involved, and stayed visible . . . . Some of my friends hated high school, but I got along. The best thing that ever happened to me was when I was selected athlete of the year.

1.05 I hate to get mad . . . I hate being sad. If I can get out of that rut, I will. I just don't let things bother me.

1.06 I've got two real good friends from high school and both are working without going on with their schooling. Some of my friends went to university with me. I know one guy who did phys. ed. and he's working in the post office now. Another guy went to work with a transport company. Some of them progressed, though. One guy is a teacher . . . not that he wanted that, but he couldn't become a scientist. He's a Grade 11 math teacher now.

1.07 If I could do those five years in high school over again, I'd start back in Grade 9.

1.08 When I went to university I couldn't believe it . . . I expected discipline, but you're just a name. I went to York University because it was convenient. There you're just a number [illegible] just didn't expect that many people. I wanted to play basketball [illegible] I found that if I did, I wouldn't be able to keep up with my courses. School came first; I wasn't prepared to flunk. First year I didn't have a car, and I'd get home at ten-thirty at night. University wasn't as good as high school. I was bogged down in work. But I didn't mind doing it. Sometimes I question the school system. It's ridiculous. You come out and you don't know where you're going. I was in economics. Here's some guy taking a course in magic and getting an A, while I'm getting a C+ in a mickey mouse course on pollution. There I'm working my butt off while some guy reads a page a week and gets an A. In economics I didn't have time to slave. I can't see why some of these courses are offered . . . they're common sense; it's just ridiculous. The courses should have been tough, and none of this mickey mouse stuff--useless. Some subjects are taught just to kill a professor's time. Sociology and psychology I liked; I could help people out.

1.09 Dad works for a construction company . . . he understood when I didn't get into law school. He continued to encourage me. I don't feel bad . . . maybe I just set my goals too high.

1.10 Well, when I was in high school I was doing fantastic . . . but in university I didn't want to be pinned down. I wanted to enjoy myself and not just hit the books. Life's so short . . . if you can do both . . . my philosophy is to experience as much as you can. If you try and try you may succeed. I like to experience . . . I don't want to be pinned down. I want to try everything, then maybe get married, have a wife, and settle down.

2.00 Work and Career

2.01 Since graduating I've had a couple of jobs. I'm working now as a stock clerk. My boss would teach me a trade, but I don't want it. I hate working in a factory. I went around to banks and to other companies, but nothing happened. I have applied for office work, but in the meantime I didn't want to sit around so I'm working part-time at Brewer's Retail and full-time as a stock clerk. With my degree it would take me about three years to get the CAO.

2.02 I'm pretty satisfied with my life, but not with my job situation. I'd like to find something better. I'm still searching around looking for something better. I'm filling out applications. I'm content with what I am and who I am. I'm easy to get along with . . . I don't make too many enemies.

2.03 My boss tells me, "You and I are the only smart guys here." I asked whether there was any chance of working my way up. He said the owner has sons, but maybe there is a chance. I said that if I find something, I'll go. When I applied for the job with a B.A. degree they wanted to know what I was doing there with a B.A. . . . "are things that bad?" It's not what you know but who you know. I've known complete dummies, but their dad knew somebody. It burns me up. But if I was in that situation, I would want to be independent. I won't beg. I want to do it myself.

3.00 Life Circumstances and Strategies for Living

3.01 There aren't too many pressures on me. I'm living at home but I hate sitting around and doing nothing . . . I don't want to wait three or four months for a job. I want to make some money wherever I can. My parents don't pressure me; they would let me sit around. My dad said that I shouldn't keep my part-time job during school. I said, "What's the difference?" If I can work and still get a 65 to 70 average it's OK. What's the difference if I get 90 and not work at all? The way I look at it, if I can have some experience outside of school it's in my favor.

3.02 My dad has influenced me a lot. Well not really influenced, but he told me he would pay the shot. I wanted to go to university . . . not like my brothers. My older brother quit Grade 10. He's working. Another is twenty-one and went to Seneca College, but he couldn't hack it so he dropped out and now he's working. They're both at home and we get along just fine. I like my brothers. Sooner or later I'll make it. Now I'll do what's available. When I get an opportunity, I'll pick it up.

3.03 The way I look at it, you have to get along. My ambition directs me to always want to succeed. It's to look forward to, but it's got to be something I want.

3.04 There's a woman in my life and she's OK. She supports me . . . she says that she knows I'm not satisfied, but she encourages me.

3.05 I don't get mad that easily. Its got to be really something to get me down. I don't let things bother me. I don't care about being important, just useful. I want to achieve and to help.

3.06 In five years' time I'd want a steady job and own some things. I would want to have time with the family. I pity my mother working for twenty-one years. She had four kids . . . that's a hard life. A lot of guys get to be the man . . . I see it as unfair. Why should one side in the marriage have all the fun? If you're married . . . share . . . spend time with the wife . . . do things together. I feel sorry for my mother, she needs a break. I feel sorry for people . . . maybe I should be a doctor. I wouldn't mind working some place like that . . . be a big brother and spend a day with a kid.

3.07 A lot of people say, "You say that now, but won't do it later" . . . no, when I say that I'll do it, I will. I've got determination, a lot of people don't. If I can make especially little kids happy, then life's not all that bad, and you can have a lot of fun. My little brothers have grown up too fast . . . I guess it's the times . . . fourteen and he wants to go to discos. The lifestyle . . . I don't know what's going to happen in the next couple of years. Kids are growing up faster than they should, instead of growing up gradually, experiencing. I had a happy childhood. I don't remember when I got a licking. I enjoyed everything.

3.08 I don't value materialism, maybe because I've seen what it means to "keep up with the Jones" . . . ridiculous. Why spend four hundred dollars on a ring . . . useless. Also, my girl friend is great . . . she's like me, easy going. We can talk. It's a fifty/fifty thing nowadays anyway. Before, it was master/slave. And that's not the way it is now unless you find a fish. I can't see it. Why can't everybody just get along peacefully? I just hope that, as time goes on, my dreams come true. Any fears I might have are financial . . . but I like to buy cash. I think things out before I do them. I think twice . . . should I or shouldn't I . . . I look at the facts.

Comments

John's situation appears unstable and full of contradictions, yet he is not hurting. He went to university for three years, and hoped to attend law school or, alternatively, teach physical education. Currently, he is earning his living in a factory, and taking a part-time course to qualify for work in accounting. He is applying for positions in an office setting.

It is interesting that he refers to his high school years as a "Golden Age" in his life. It was a time when, according to him, the contradictions in his life were not as evident. Everything important came together for him in high school, while in university he found himself confronted by undesirable choices and consequences, in a setting which he found too large and impersonal. (1.04, 1.07, 1.08, 1.10).

John defines himself in two ways: he is determined to succeed and is easygoing. He suggests that he tempers his ambition with a strong sense of the limits to which he is willing to go. In his university career he valued work experience more than high grades. Did he know then what he says he knows now? That the degree would not assure an appropriate career? Aiming for teaching or law required a university degree, but neither profession seems to have motivated him enough to persevere academically. His statements regarding his family would indicate a nonuniversity culture at home. He went to university, he says, because he has high goals for himself and the university degree corresponded with these. However, university as a situation did not attract him at all; in fact, it disillusioned him. As a means to a degree, he felt it was inefficent and unattractive. (1.01, 1.05, 1.10, 2.02, 3.02, 3.03, 3.05).

A comparison with his contemporaries is mixed. On one hand, John mentions friends who have obtained good jobs without having passed high school; on the other, he mentions friends who have poor jobs in spite of their university or college degrees. He asserts that his degree is something "no one can take away from me"; in other words, it is an accomplishment which, although it hasn't launched his career, is something definite to show for himself. (1.02, 1.06).

John asserts a lifestyle which stresses humanistic, community values over prestige, income, and competition. However, can he integrate his career with this style? He makes a series of references to activities which help people, but does not seriously entertain a career in this area. One way in which he resolves these differences is by saying that he likes his life, but not his job situation. In other words, he is separating his job and career from his life. (2.02, 3.06, 3.08).

At the end of the interview, John mentions that he is a careful, methodical person who thinks out his actions. It may be this quality which is allowing him to balance the several contradictory strands in his life. He is determined, but not in a rush; he was at university, but kept one foot in the work world; he is working in a factory, but taking accounting courses. It will be unspectacular, but he will find his way; and it may, in the end, approximate what he now has in mind. (3.08).

Penny

Penny lives at home, caring for her younger brothers and sisters and maintaining the household while her mother works for a fruit storage and shipping operation. Her father has been dead for a number of years. She lives on the edge of a village on Lake Ontario, near Cobourg. Since graduating from Grade 12 she has been unable to find long-term employment, but continues to hope that something will become available.

1.00 Education

1.01 In high school I took all different things. I didn't take a specific course. I picked a four-year course in Grade 8. In Grade 8 you fill out forms for subjects, and the number of years you want to take them. Most of those who chose four years then went for four years. The five-year kids got the high marks. You don't have too many subjects in high school with the five-year group. Most people I knew went to Grade 12. In my group, most went to Grade 12.

1.02 There wasn't much that was important in high school. I was glad when I got out. I really hated some teachers; there were some others I liked . . . some didn't yell. I hate teachers who yell all the time. No teachers really helped me. I was just an average student, but in one year I got 90 in some subjects.

1.03 I thought of doing typing at Sir Sanford Fleming. Then I changed my mind. I don't know why. I'm not sure whether you can get loans to go to school. It costs a lot . . . I don't know how much. I'd like factory work. I don't like office work. In high school I wanted office work, so I took accounting, typing, and data processing. To get a job you need experience. My typing wasn't good enough. I gave up the idea of office work about a year after high school. Lots of people with Grade 7 or 8 do as well as high school graduates. A lot of kids know that even with an education you can't get jobs. Maybe you would with college or university education. I thought there'd be lots of jobs after Grade 12. I don't have as much hope now. It's really hard going for jobs and then having them tell you you need experience. There's not much I can do about that.

2.00 Work and Career

2.01 I've tried getting jobs, but I haven't had too many. They all want experience. I worked part-time where my mother works in the apple factory. I worked in tobacco and I was a waitress for seven or eight months in a hotel. Since then I've put in a lot of applications. While I was in school I worked in the tobacco fields. I knew people and they would contact us when they needed help in the fields. We pulled leaves . . . we would walk down the center of the row and take off the top leaves.

2.02 Most of the help for getting jobs came from relatives, not much came from school. I did most of it myself. Lots of kids go to jobs because their parents worked there. Most of my friends work in stores and factories. There aren't too many jobs around here. I'm thinking of going to New Brunswick. My brother and sister are there and they say there's work out there. But my mother needs me here; it's a big family. I'd probably get homesick if I went to New Brunswick. I do a lot of stuff around the house. There are five younger brothers and sisters and five older ones. The youngest is thirteen. Only one is going to school, the rest are working. My sister was skipping school all the time. She didn't like school, so Mother decided she could skip, and now she's got a part-time job.

2.03 I want to work somewhere. My sister works in a factory in Cobourg, and she said they'll be hiring pretty soon. There's not too much available from Manpower. I go right to the factories and fill out applications. Manpower just gives jobs to people on unemployment. I've got my name all over. A new plant opened up in February. We thought we had a chance, but they only hired laid-off people from another plant. They got these people from Manpower. I think it's a rip-off to hire only people who are laid off. That doesn't give anyone else a chance.

2.04 I watch a lot of sports and soap opera on TV. I've been out of work since last year. Usually I have plenty to do here helping out my mother. I didn't mind the restaurant work. I quit because the person in charge gave us a problem. Now they've got all the help they need.

2.05 The family's not too good at getting work. One of my brothers collects garbage, some work in factories, but they hire only men. Mother works at the apple factory, bagging and shipping apples. She doesn't earn much. Father died in '71. Father worked for the Highway Department in the wintertime. He died from cancer. They found it in '70 and he died the next year. There are six kids at home, but only three are home during the day. Us girls do the dishes and the boys do the outside work. I do the meals and my older brother does the fixing around the house.

3.00 Life Circumstances and Strategies for Living

3.01 I went to Toronto last summer with two of my sisters and stayed the weekend. There's more to do there than there is here. We went to Centre Island, but that was boring . . . little kid stuff; but Yonge Street was fun. It costs a lot to go to Toronto on the train. My mother and brother have a car and some of the other brothers do, too. No one would drive in Toronto, but the 401 is OK.

3.02 I don't want to get married yet . . . maybe sometime. Everyone says I'd be a good mother. I'd only want a couple of children. My husband would at least have to have a job. I don't care what kind, just something steady.

3.03 We're Protestants, but we don't go to church much. I never go to any church social activities, and I don't date much. There're some boys I have liked. I read true stories and mysteries, a little, not much. I read the Cobourg paper. I don't often see the Toronto paper . . . all those killings in the Toronto papers, not much of that around here. It's so small around here, there isn't much going on. I'd rather be somewhere else. I'd never go to Toronto. I've got an aunt there, and I'd go there just to visit. I'd move to Cobourg.

3.04 My family's from around here. I don't know too much about them. I knew my grandfather and grandmother. They got killed when I was nine. We weren't farm families. My father's background is English.

3.05 I haven't seen many of the kids I went to school with. Everyone knows everyone else's business around here. They're all related to everyone else. Some people have money. I don't know too many people in town. The ones I knew got married and moved. They've all left the area. The only area they would move to is Cobourg. Most of the ones I really knew, I don't hang around with now. I'd like to move, but not too far. We own the land we live on.

3.06 When my brother and sister married they married a brother and sister in New Brunswick. They've built houses there. They come down every year and they used to get homesick, but they don't any more.

3.07 There aren't too many things I'd really like to do. I don't care what kind of job I get. I'd want to work even after I got married . . . just to be out. I don't think about what I'd really like to do.

Comments

Penny has not been able to find a job of any consequence since graduating from Grade 12, in spite of sustained effort. In high school she prepared herself for clerical work and made plans to continue this education in community college. However, being unable to find work, she relinquished both plans. She now simply hopes for a steady factory job. A sense of resignation, "lowered expectations," and a firm sense of realism pervade her presentation. She has not given up--only adapted to personal, family, and area circumstances. She seems to be making the best of a bad situation. There is stability in her family. They own the house and land on which they live, and family members help each other, through a "traditional" division of labor within the home. The out-of-doors provides recreational space and opportunities for hunting and fishing. (2.05).

Penny did not enjoy high school; she felt her teachers were neither helpful nor interested in her. Partly because of the group with which she identified and associated, she rejected the Grade 13 option in the eighth grade. She had no access to information, at home or school, on how to deal with the options which presented themselves to her more positively. (1.02, 1.01, 1.03, 2.02).

In Penny's high school there seems to have been a cleavage between those in the five-year stream and those in the four-year stream, with little movement between them. None of her brothers and sisters went to Grade 13, and some of them stopped short of Grade 12. Graduating from Grade 12 thus represents an accomplishment on her part. However, she is not sure it was worth it, considering that those who graduated from Grade 12 are doing no better occupationally than those who did not. She is well aware that she lives in a region in which there are very few jobs available. (1.01, 1.03, 2.02, 3.05).

An urgent strand which runs through Penny's report is her inability to gain the very experience which her potential employers demand. By her account, Manpower favors those who have been laid off and are collecting unemployment insurance. This is a status Penny has never been able to achieve, and a situation she feels is unfair. (1.03, 2.01).

Another aspect of her life is that a large city is not an option which she finds attractive or is even willing to consider. Toronto is not a realistic possibility for her. Instead, possible places of emmigration are nearby small towns such as Cobourg or New Brunswick, where some of her family live. (2.02, 2.03, 3.01, 3.05).

The only successful people she mentions that are close to her situation are a brother and sister who moved to New Brunswick, married, and settled there. These two come up a number of times in a very positive and attractive light. (2.02, 3.06).

Currently, Penny sees herself as serving a very useful function within the family: making it possible for her mother to continue working by maintaining the household. She looks forward to having a steady job, even after getting married. She wants to be able to get out of the house. She says, near the end of the interview, that she is not in a position to think about what she would really like to do in the future. (3.07).

Janice

Janice is single and lives with her parents in Toronto. She took the four-year degree in physical education from the University of Toronto and has just completed the Bachelor of Education there. While waiting for a position in a high school, she supports herself through jobs which use her skills in bookkeeping, filing, and typing.

1.00 Education

1.01 I was studying in the Faculty of Education. Now I'm finished and yes, I'm an unemployed teacher.

1.02 As far as my work is concerned, my formal education has meant zilch. What I'm doing is minimally related to school. This summer I had five part-time jobs that had nothing to do with my schooling. I learned nothing in school until I was out teaching, even from my formal phys. ed. classes in the Faculty of Education . . . you have to make your own mistakes and then you think "Oh yeah, that's what they were trying to teach me." They treated us like kids and none of us understood their techniques till we got out.

1.03 Everyone should get Grade 13. Not taking it shuts so many doors, and that's true even for the practical skills. We are still with the idea that you're nothing without Grade 13. Book learning is not as good as having experience. You have to have both practical learning and teaching . . . "unless you do it, you don't know it." I think cooperative work study programs are super. After Grade 13 school is not good at all unless you are specialized, and you need the schooling for that piece of paper.

1.04 High school should be improved with more practical things such as projects and small tests. Children are being bored. Kids want to move on, and authority alone at that age doesn't work anymore. I've been in it so long . . . I've had so many bad experiences with teachers, and very few good ones. Teachers can change the system. No one says students must be bored. Individual teachers can just about do anything to make changes. And you have to give the children something to learn that they choose to do. Children and adults respect discipline and rules.

1.05 I took all subjects in high school. I was on the athletic council and a member of the student council. I went straight on to the University of Toronto where I did a four-year degree in physical education. I wanted to be a teacher so it was necessary for me to go to university. I don't want to go beyond the Bachelor of Education since I don't have to, in order to teach.

2.00 Work and Career

2.01 My job prospects for September are pretty good. I hope they're pretty good. You don't see elderly phys. ed. teachers. The women become thirty-five and they quit. They get pregnant and don't come back. I have super practice teaching reports, and that will be helpful as well. Right now there are few phys. ed. openings. I know several kids who have gotten jobs mostly in Separate or Catholic schools. Oh yeah, I got a couple of "Dear John" letters. Three were from where I practice-taught, and one was from somewhere I didn't even know. But they wrote on the bottom of the letter how nice my resumé looked. I had a lot of help with the resumé, but I put it together myself. It was in a nice blue folder, and I outlined all the pages and put my picture in. A girl friend typed it on an IBM typewriter so that we could write in each principal's name. It looked good. If you present yourself well it will get you an interview.

2.02 I've had a couple of interviews. They're not hiring now in phys. ed., but they feel they will have an opening. They don't know yet, and a lot depends on their enrollment. I'm really not deterred by the lack of jobs. I always wanted to be a teacher. That's what I want to do and I've gotten this far. I have one more goal to achieve and I think I'll get it. I've always wanted to be a teacher.

2.03 I have other interests but I don't want to pursue them as a career. I do cake decorating, creweling, needlepoint, and découpage. I sell all of these. And I also go away weekends. I like handicrafts, and I could almost go into business on that, but I want to teach first. I feel I can be the most help to high school students. In my field a lot of ability is developed in the younger years. It is developed in high school, too. I try to teach students habits that I think are right . . . a lifestyle. I want to get them to think about their moral values and values in general. I can relate best to teenage groups. Now I'm at the age when I've come through the system . . . the whole bit. Now I can see and relate to all the problems the kids go through and also to those of adults. I could always relate to my parents. I know that they knew a lot more than I did, and that they were doing the best they could.

2.04 I have always wanted to be a teacher, . . . since I was eight and living in Vancouver. I had a big rec. room and played school in it. I would be the teacher and I used to bring the children in off the street. Father bought a big desk for me and a big blackboard. That's what I wanted. He would sit in a chair and be a student. I like to help people and teachers are out to help. There are so many things teachers teach that aren't on their daily schedules. They teach children things like being punctual, being neat, and organizing themselves. These are important for later life.

2.05 In my first jobs I was always a waitress. I thoroughly enjoyed it. But there were too many hassles. Through friends I got into accounting. Now I have several part-time jobs in accounting. If I don't get a teaching job, I'll get on the supply list. Then, if I don't get called, I'll go to the accounting office. I love it . . . the people are super.

3.00 Life Circumstances and Strategies for Living

3.01 I like to smoke. I've smoked for years. I don't want to quit. It doesn't hamper my physical abilities at all. Since I can do everything, I don't want to stop. If I coughed or couldn't run or swim I would stop. I used to weigh a lot, but I lost thirty-five pounds. Granted, if I stopped I would be better off. I can do a lot more since I lost the weight. I feel fine, so I smoke.

3.02 I don't want to have children. Sure, I'll get married, but I don't know when, although I'm already twenty-four. I haven't ever been close to my aunts and uncles, but I have two super nephews. I'm very close to my nephews, and always will be. They come over three times a week. Children cost a lot and I guess I'm a little selfish . . . they can be a burden. This sounds funny because I want to go into teaching. I want to continue my teaching if I get married. I don't want to quit to have children, and I don't think it's fair to work and have children. It's hard to have one salary to keep you going. I don't know if the guys I go out with agree with me . . . I haven't asked too many questions. I like my dad. I haven't found a guy I like. No one is like my dad . . . I've tried them all. I'm very set in my ways. I like the way I live.

3.03 My father's very humorous, very considerate, thrifty but not tight. He has always provided for us; he's sensitive, and he helps us out. I'm looking for someone like my dad. I'm very difficult to get along with, and in that way I'm very much like my father. I'm seeing it now as I get older.

3.04 I've got one sister and she's got two boys. She got married too early. Her husband does a lot that annoys her. I don't think she was ready. I am twenty-four now and I've been everywhere . . . I have my own car and it's paid for. I live at home . . . I come and go as I please. I just leave a note . . . that's only fair, and I expect the same of my parents. My sister went straight from university to get married. In about ten years they'll be in great shape. The children will be grown and the house will be paid for. He's got a great job, so in the long run she may be better off than I will be.

3.05 I am still maturing . . . I have a lot to learn about life.

3.06 I believe very strongly in what I believe in. I'm very stubborn. I hope I can listen to, and hear, another person. I'm a strict disciplinarian. I'm fair, but tough. I'm not going to close my eyes. I'm strong. I have a lot of girl friends and they know I say what I feel. They still talk to me. If you can't say something nice you don't say anything. I'm honest. They know I'm strong and a lot of people are still my friends.

3.07 I was born in Toronto. My dad is in insurance, so we traveled around a lot. My mother just started work again. She works three days a week in the bank.

3.08 I'm not a woman's libber. I like guys to open doors, and I want to get dressed like a woman. I believe in equality in the work force.

3.09 I'm a very organized person.

3.10 There's a lot of politics in the university. You don't write what you want to write . . . you write what the profs want. There's nothing you can do. You don't do kids a favor either when you let them hand in papers late. When I teach I expect punctuality, but I explain why. I don't get into community politics.

3.11 I'd like to be teaching, but I'm pretty successful now already. I'm not hung up on finances. I work and I have this to pay for, or I want this.

3.12 I'll never leave home. My father knows that. Eventually I'll move . . . when I want to leave. That's going to be when I'm financially able to leave.

3.13 I haven't changed at all since high school. I want to teach . . . I think I'll be a good teacher.

Comments

Janice impresses one as a very single-minded, strong-willed individual. She has put all of her career aspirations into teaching. She is aware of the job situation for teachers, but is certain that the position will become available to her. This sureness about her future seems to be because of her confidence in her preparation and in her skill with the job seeking process, as well as the result of her single-minded dedication to teaching. (1.05, 2.02, 2.04, 2.01, 2.01, 3.13, 3.02).

Janice is obviously a capable person who has taken care to make the right moves. She lives at home, thus cutting down on her expenses, and she has developed several ancillary skills which [illegible] as hobbies as well as secondary money sources. In terms of more direct career preparation, she seems to have all the prerequisites, including the motivation to succeed. Remarkable is her belief, reiterated at a number of points, in the ability of the individual to succeed, given the proper habits and motivation. This belief will be tested by the present job situation for teachers. She describes a home setting which has been supportive of her ambitions and a school situation which has not put her off, in spite of criticisms she has of education as she has experienced it. She is committed to the shaping of children according to values she sees as important in life. Janice believes there is more to education than reading, writing, and arithmetic. Good teaching can prepare people for life. (1.02, 1.04, 2.03, 2.04).

Janice says that she is strong-willed and holds strongly to any beliefs she has. She measures others according to a standard which she herself has adopted. She identifies this standard with her father. Her image of herself is that of "tough but fair." She feels most teachers and teaching situations don't fulfill this image. (3.06, 3.10).

She is very much an individualist, believing strongly in personal responsibility and independence. In this, she stands totally by her father. She is sure of her father, her values, and the rightness of her dedication to teaching. None of these seem to have let her down. She describes her search for a position in terms which suggest that she is sure to find one, given the manner of her approach. (2.01, 3.03, 3.04, 3.10).

Although she is critical of teachers and teaching, including that which she experienced in teachers college, she states that the individual teacher makes the difference and has the option to teach effectively and with results. (2.04).

Janice feels that she has been successful in reaching her goals and that her only unfulfilled goal, a teaching position, may not turn out to be the most difficult of her life. (2.02, 3.11).

Greg

After dropping out for a year, Greg finished a three-year B.A. He is trying to establish himself as a visiting teacher in school science programs, while augmenting his income with part-time jobs unrelated to his main interest. He is single and lives with his parents in the Toronto area.

1.00 Education

1.01 I graduated a year ago this past June. I took a three-year Bachelor of Science. I'm toying with a fourth year. . . . My Grade 13 average was one and one-half percentage points short for the main campus of the U. of T., so I had to go to Erindale College. I didn't think much of that. It meant that I had a long distance to commute. I didn't like the college at all the first year. Erindale was considered second class . . . I didn't feel it as second class . . . and biology was superior at Erindale. But still there was the feeling that "I'm not good enough for downtown." I made a big mistake by not taking a year off after Grade 13. My parents didn't want me to, but I didn't want to be at university; I wasn't ready. I had definite plans to go to the university, but I wanted a year off. I wanted to work for a year, no matter what the work, just to earn some money. My parents were so negative about the idea, I didn't give the kind of work I'd do much thought. I didn't want to rock the boat, and I wasn't in any position to leave home. I'm still not ready to leave. I need a house for the herpetology collection.

1.02 I took four years to get the three-year degree. I had the wrong attitude and failed the prerequisites. My parents saw I had trouble, but they didn't sympathize. I almost quit. Then I decided to take the third year over again part-time. It was the best thing I ever did. I took courses that I enjoyed and I changed my attitude. I really had to pull myself up. I had a good average the last year. It was such a struggle to get the degree, that it means a lot to me.

1.03 I was very quiet the first few years in high school. I wasn't big in sports or in anything else. First I went to public high school, and then to private school in Grade 10. I didn't like the atmosphere in the private school. It was too snobbish, there was only a limited choice of courses, and it was an all-male student body. I changed quite a lot in high school. I was very rebellious in Grade 13. I was tired of being introverted . . . of being the butt of jokes. My parents wanted me to stay in the private school. I didn't want to rock the boat.

1.04 After high school I had just wanted to learn about the real world. I didn't learn much from the actual curriculum in university. You pick up a lot from the people you're with. The courses are too theoretical. There's more I could have gotten from university. If I went back I would do it differently. I've got a different attitude now, a clear idea of how I could do biology. I knew then that I wanted biology, but I didn't know how. I talked to the assistant registrar, but I didn't learn much. There was no guidance person in the high school. I was told that I should go to university, but that's all. I'd like to go back for the fourth year . . . that's not a big thing.

1.05 People at MacKenzie King high school are really caught up in the artsy/fartsy Rosedale scene. They keep to the same social levels . . . they had lots of money. Erindale was different . . . quite a bit of variety. A big part of education is being exposed to very different people. MacKenzie King was boring; everyone was the same. They got down on someone who was not like them. You had to fit a mold or you got ostracized. I don't keep any friends from high school. I wasn't in that background when I was young. We lived in a smaller house . . . we were in the suburbs. The school was all WASP . . . they discriminated against others. There were some Jews and a few Chinese. But they discriminated against anyone not white. It was there, even if it was not pronounced. I don't care what they say, it was there.

1.06 I am basically the same background as the other students at MacKenzie King. But I didn't see myself as the same as they. I saw myself as a lot different. There were others there like me. I could sympathize with them, but we weren't friends. I like a mixture . . . I had a number of close friends. I was expecting university to expose me to many different kinds of people. But it was still pretty homogeneous. That disappointed me. I did find a group of crazy biologists.

1.07 Herpetology courses are offered at Guelph, but I didn't go there for practical reasons. Also, they wanted math and I'm terrible in math. I never gave York a thought. At the time I didn't think of it as a university. It was never mentioned at school. U. of T. was talked about and I was accepted at Trent. I never thought of community college . . . probably because MacKenzie King was university-oriented.

2.00 Work and Career

2.01 For the summer I worked for the Bureau of Broadcast Measurement. I was a file clerk and data analyst. The job ends tomorrow. August is my holiday. In a week tomorrow I'll be leaving for Tennessee and two weeks in the States.

2.02 I've got my own business. I give lectures and demonstrations around schools. I free-lance, using my own collection of specimens. It's a market that has to be developed. There are not many in the field. It's my first full-time year . . . in another year I'll know for sure whether I'll be able to make it. I can do this only because I live at home. I didn't make a living off it last year. Fall is a bad time . . . I only get four or five calls per month, but after Christmas it picks up. March and April are good, I get about six calls per week then.

2.03 I'm interested in teaching, but not in the traditional sense. I'm interested in outdoor education, something in the science field. My background is in biology and natural science. My real interest is in reptiles . . . herpetology. There's not much offered in the way of courses in this field in Canada, except in Guelph. But I can't afford the residence fees and the tuition is too expensive to go there.

2.04 My interest in herpetology started quite young. I got started in the business three years ago. I got started with an older friend. His health was failing so I took over his dates. There's a need . . . the schools need a supplement to their science courses. When he died there was a void. I'll be doing it differently than he did . . . I'll see if I can make a living from it. I have a large circle of friends in my profession.

2.05 I've really enjoyed the last year. It's been a working holiday . . . I've been able to pay my way and to keep up my collection.

2.06 From a very young age I vowed not to go into business, not to become a doctor or lawyer. It didn't interest me . . . they were too conventional. I wanted something different and I was interested in animals from an early age.

2.07 In the coming year I'll be in the lecture business . . . I'll see what comes of it. I'll see what I can do in terms of expanding it. I'm going back to school at night part-time for the honors degree. It looks good on the wall. The employer, when he sees the degree, says that the person can think . . . that he's trained to think. I'm glad I've got it. I'm interested in the practical side of my field . . . so further education may not mean much in my case.

3.00 Life Circumstances and Strategies for Living

3.01 I get along better now with my parents. They meant well but I couldn't convince them of what was best for me. My parents are very conventional. They're open-minded, but conventional. I'm a weird mixture of conventional and different. I wore my hair long after I was seventeen; earlier I had very short hair. I rebelled at eighteen. At camp I ran the nature program . . . "back to nature with long hair." They really got upset; they thought I was freaking out. I'm more careful now.

3.02 My father studied engineering, but he's a manager now.

3.03 I enjoyed rebelling against the system . . . I'm a man of contradictions. I'm pretty conservative, politically . . . just like my parents. I'm gung ho about civil rights. I would have made a good campus radical . . . going against the norms of society . . . but being different is difficult. What's happening in this country? We don't have rights written down the way they have it in the States. It's getting worse yearly . . . I don't like it. I'm not a socialist or communist . . . I'm a capitalist democrat. Our system has drawbacks, but it works pretty well.

3.04 I hate disco with a passion; the life-style and the music. I love music, but I don't have any talent. I like progressive rock . . . complex music . . . disco is mindless. I like to be different . . . just the way I am. Everything is disco . . . it's taking over. If you looked at my record collection you would see a lot of variety. I listen to stereo a lot, and I go to rock concerts. I also read a lot and on weekends I clean and feed my collection and sometimes I go away camping.

3.05 I don't intend to leave home . . . it's pointless; it would be crazy to do so, financially and for my collection. When I move out I want to do it in an organized fashion . . . when I can stand on my own two feet. A lot of my friends who moved out botched it up. I'm not thinking of marriage. I'm not ready financially. I'm also not mature enough . . . I'm still irresponsible . . . I like to go out and have fun. I'm married to my reptiles. My collection is my life, it comes first. It takes a special person to marry.

3.06 I drink, and I smoked for awhile, but it got too expensive. I don't think of myself as emotional. I can control my emotions and that's important to me.

3.07 Success for me is to be self-sufficient and have a good life . . . being my own boss. I like the idea of being self-sufficient. I'm a pretty practical person. My girl friend is someone who affects me and the other way round. My parents affect me and so do people in my field. There aren't many of us . . . we have to stick together. I don't believe in being influenced by others. It's a sign of weakness to be influenced by others.

3.08 I ask my dad to help me make decisions and I consult with my friends. Then I make the decision on my own, and I'm willing to take the consequences. My friends are very independent. They all have different lifestyles. Many of them are in my field . . . One is a poet . . . he's starving. It's fun to have a variety of friends . . . people with personality. I'm not a people person though. I'm a loner . . . not the friendly type.

Comments

By keeping his costs down and continuing to live with his parents, Greg is trying to build an independent occupation based on a lifelong interest in animals and in connection with these interests, he has developed a tightly knit group of friends and associates. By providing a home for his collection of live specimens, his parents are, for the time being, subsidizing his career. He is dependent on school science programs to hire him for lectures and demonstrations on a fee-for-service basis. (3.05, 3.02)

With respect to his career, Greg appears to have learned mainly from his associates and through his own inner resources; the university program in which he was enrolled seems of ancillary use. He rejected the one post-secondary program in herpetology in the region, due to the expense and the math requirement. This doesn't quite fit with his avowed dedication to the subject. Insofar as he portrays himself a loner, learning through his own devices makes some sense. However, he repeatedly makes clear that his parents did not cooperate with his developing needs and interests and, as he was dependent on them financially, he had little choice of universities. (1.04).

He sees university mainly in terms of the respectability and credibility his degree provides. University was also a place for his commitment to being different; he justifies his career goals, in part, on their unconventionality. Not wanting to be like others runs through much of what Greg has to say. (3.04, 3.03, 2.07, 2.06).

Greg's parents placed much pressure on him to get through high school successfully so that he might go to university. Going to Guelph would have meant bucking his parents by openly connecting his interest in herpetology with his career goals. His parents didn't consider this in their apparent anxiety over his education. Greg says repeatedly that he did not want to "rock the boat" at home. He did what his parents wanted him to do, in spite of his own desires, but did it in his own way. He rebelled in high school, failed his third year in university, and took a year off before deciding to return for a successful graduation. (1.01, 1.03, 3.01).

It was only by failing a year of university that he was able to go to school on his own terms, rather than his parents'. He says that taking the year off was the best thing he ever did. The point is that, had he not failed, he would not have taken a year off. His effort to do so after high school had met his parents' strong resistance. (1.04).

Greg states that being influenced is a sign of weakness, and yet his life seems to have been a continuous struggle with influence from others. The influences he mentions are all negative from his point of view. As a result, making his own decisions and doing things his own way have become hallmarks in his life. His stated interest in civil rights is interesting because what is involved is the issue of individual rights in the face of larger entities. His concern does not extend to the sociopolitical system--he is satisfied with the status quo as the best available. (3.03).

Greg is giving himself a year to make it on his own by lecturing and demonstrating herpetology. He is well aware that, at the moment, he can only do this because he lives with his parents and is willing to earn money in unrelated work. Herpetology has given him an identity, a circle of friends, some independence, and something which makes him different. (2.07, 3.05)

Carl

Carl is married and lives in an apartment in Toronto. He finished Grade 13 and registered in a community college program, but subsequently dropped out. He has a skilled job on the production line of a major manufacturing company. His wife also works.

1.00 Education

1.01 I wanted to study social services or physical education. I was never much for school. I went to summer school to improve my grades, but I wasn't accepted by the York or McMaster phys. ed. program. McMaster offered me a general course, but I decided on a business course in a community college. When I got there, it was worse than high school, so I changed to another college. It was the same there, so I quit. I went to work.

1.02 At one time I really thought phys. ed. was it for me. I was really excited. After Grade 13 my marks were 59.9. I could have improved my grades, but I opted for community college.

1.03 There were only eight hundred students in the high school I went to. I was lost in college. That may be why I did not go on. But I also wasn't interested in the course. It wasn't for me. The business course was so easy. I'm not into going after that little piece of paper. The guidance counselor in high school wasn't very useful.

1.04 I'm interested in people. I like to listen to other people's problems . . . I can relate easily to people. I can get into other people's problems; people can trust me. I trust everyone. I could have gotten into psychology and maybe become a counselor, or gone into volunteer work. I'll try some volunteer work. If I like it, maybe I'll sacrifice and go back to school.

1.05 I was really close to a teacher in high school. But only three teachers really helped me. When I first went to high school I really had a good teacher in math. As a result, I got the highest mark in math. The year after, I had a foul teacher and got very poor grades. After that teacher, my outlook on teachers really changed.

1.06 I have a friend who graduated in phys. ed. and is now driving a truck.

1.07 I had a great teacher in Grade 9, but that's all. I got turned off. I had one good teacher each year. The Grade 13 math teacher really put people down. I wanted to prove to him that he couldn't teach. I had a lot of run-ins. I wanted to transfer to another class, but the principle wouldn't let me. I made the teacher's life difficult and he made my life difficult. They were on real ego trips. I've rarely come across a teacher who really cares. Students are really proud of a dedicated teacher. I was much more grown up in college. I think it was partly because you had to pay for the courses and partly because the teachers leave things to you more. It's just more professional than in high school, and they let you grow.

1.08 In Grade 13 my whole life became the high school. There were a lot of things I liked. I had it all planned out with the universities. It just didn't work out that way. In the first half of Grade 13 I did the best I ever did. Then the same old thing happened. I saw the same old stuff going on. I came down. In the third term I really worked again. I really liked school life, the whole atmosphere. My parents pushed school. They would say, "We left Portugal for you." My mother was a teacher and I wanted to be a teacher. I enjoyed the social aspects of school and the sports. I'm still involved in sports.

1.09 In college I had a lot of free time. If you got 60 in any subject you were exempt. I didn't feel I was learning.

1.10 I didn't appreciate high school. The teachers made one too rebellious. I was never encouraged to appreciate high school. Some students got a lot out of it. I never had the foresight. The detentions made me even more rebellious. You hit eighteen and you've had enough. I want to be treated like an adult. Giving you a detention because you're late . . . I don't go for that. They should call you in and talk. Teachers are late. It's the same with students, but they take a superior attitude.

2.00 Work and Career

2.01 After quitting college I went to work. I got a great job at Rothman's. I started as a mail boy and was promoted to inventory. They wanted to transfer me to Calgary and I didn't want that, so I was stranded. I was out of work for nine months, and that straightened me out. I'm working at GM now. That will be a dead end for me.

2.02 A lot of people I speak to are going back to school. They're dissatisfied and not happy. I'm making $16,000, but I'm not happy. I'm an electronics technician. By following blueprints, I print wires onto boards. It's easy . . . it's not a challenge. I'm interested in electronics and it was great for the first three months. It's as high as I can go unless I become a foreman, and that doesn't interest me. I'm stuck. I don't know. I can't get to where I want to be. I'm very involved in sports teams, coaching and so on. I enjoy my marriage and I'm very happy. I really don't know. All the things I enjoy, I'm not getting paid for. It's very different from school. It's hard to adjust.

2.03 Where I work there's a lot of pressure. You can't speak to anyone . . . really strict authority. The union and management take years to resolve problems. It's a big ego trip. I can't take that. I'm involved in a grievance procedure right now.

2.04 My father got me the job.

2.05 You are not allowed to speak to the person next to you. You can't go to the washroom when you feel like it. I had another job in the same company . . . I was a storekeeper. That gave me contact with a lot of people. I was in that job for seven months until a new guy came in. I taught him the job and then I had to go back to my old job because the other fellow had seniority with the company. I like to struggle . . . I had no choice. I had to make a grievance to be put back into the storeroom. I'm just waiting in my old job. There's no challenge unless you are working with people. In phys. ed. there's a lot of challenge. It is just not possible to get into that . . . it's tough. I haven't met many people who are satisfied with their work. They all want something better.

2.06 I have to work now and make the best of it. In the storeroom I could have done that. I have to abide by the rules of not speaking. I have to get a pass to make an important phone call. A little while ago, I was off because I had bronchitis. While I was off I played hockey on a Sunday by doctor's permission. Somehow they found out at work and I was called in. Things like that burn me up. I just couldn't handle it. They are trying to squeeze me out. The only way to survive is to see it as a job. One of the people at the job committed suicide, another is in a mental institution. Rothman's was very decent, but at GM, if you are late for two minutes you can be fined. To them it's like breaking the code. The foremen are petty tyrants.

2.07 In the summer, while I was still in school, I was a caretaker in a hospital. I enjoyed that. There were lots of other students and it was a party . . . we always tried to break the rules . . . it was a great atmosphere. We got the work done, but what we did with the rest of the time was up to us. If it's not like that, it's a prison atmosphere, and I'm not the prison type. I'm easy on others. Rothman's was not my dream job, but I was involved. At GM the money's great, but I feel I have regressed. They say I'm lucky . . . Ford is worse. A real repressed atmosphere.

2.08 We get three weeks off. The strike at GM was such a relief. I saw happy people at GM for the first time. My father has been there for fifteen years. He's satisfied, and waiting for his retirement Because of my getting screwed, he's getting to realize what's happening at GM. It's easy to shut yourself off, but I can't. People get fired for minor infractions like wearing a hat against the light.

2.09 During the strike I had holiday pay coming, so we bought the furniture for the apartment and took a trip. We had $1,000 in savings. We had a good time during the strike. We went to Florida for a week . . . it was a great relief. I'm sorry I went back to GM, but I needed the money. I would like another job, but not in an office . . . it's cutthroat in an office. Factory jobs are more down to earth. At Rothman's people couldn't be bothered. I might take some courses. I would even try a career at GM. But that's impossible . . . you have to know the president's son.

2.10 I'm waiting to hear about my grievance. I have two years seniority. That's pretty good. If I get laid off, I get 75% of my pay for awhile. I'll stay for five years at GM and see. I was going to enroll in a course this year, but it's hard to concentrate, with the grievance and all the rest. I was interested in a sales or marketing course. I wouldn't rip people off; I want to help them.

2.11 I'd like to work in sales, or marketing, or maybe real estate. Or, I'd like to work with Parks and Recreation in the city and work with kids. For that you need a degree. I'd like to combine marketing and sports administration. I'm also on a team. I've got experience; I can put together a sports organization in a part of the city. I'm really good at psychology with kids. GM is a means, and that's all. Sports leads to friends . . . lots of satisfactions . . . that's where I get my job satisfaction. I'm not after prestige; "whatever makes you happy." I have my head straight . . . it's just hard to come by the opportunity. A friend just went back to university. I won't have any problem getting into university. I've thought about checking the program at Atkinson College. I won't be able to get into the phys. ed. and recreation programs. I can't afford to quit my job, and that's really bad.

3.00 Family and Ethnic Group

3.01 My family is from Portugal. It was a big move . . . it was traumatic. My father came first. I didn't know anyone . . . I was seven or eight years old. I don't want to move again. My wife is the only girl in her family and she is very close to her parents. All my friends are here . . . I enjoy it.

3.02 My father's brother came after him, and my mother, my brother, and I came last. My younger brother went to Ryerson in a business course. He should be more relaxed . . . he's very nervous and worries too much. I'm different. My brother and I never got along, but we have gotten much closer in the last year and a half . . . especially after I got married. He comes to the sports events I'm involved in.

3.03 I lived at home until I got married. We're very comfortable. Anne and I got married with $11,000. We were both laid off for awhile and that was rough. I've got a very creative wife. She's got a nine-to-five job as a secretary with Office Overload. She'll be getting into photography . . . I bought her some equipment. She likes people, too. I met her the day after graduation from high school. She was my best friend and later, we decided to get married. I'm the one that starts things . . . I draw her in.

3.04 I won't have any discrimination because I'm Portuguese. When I first came, we lived on College Street. All my friends were Italian. I was in a New Canadian class. Everything was different from Portugal, even the math. There weren't any other Portuguese. Once when I was called an immigrant--I hate being called an immigrant--I decided to be English. I spoke only English. I didn't go into soccer, I played football and hockey. Between Grade 4 and 7 I never felt I belonged. From Grade 8 on I felt I belonged. I worked extra hard to belong. I speak English better than I speak Portuguese. Now I'm beginning to appreciate Portuguese. I began to realize what you are doesn't matter.

I had wanted to be a Canadian so badly. Now I accept it . . . having two cultures is a plus. I married an English girl from a very Anglo-Saxon family. I worked hard for what I am now. I couldn't speak with anyone at first. I got to know them much better by watching. You get an extra sense. You watch their reactions. Kids can be very mean. Being Portuguese has helped me. Anne can't imagine the adjustment I have had to make. I appreciate things more because I was an immigrant. I want to take Anne to Portugal to see the place.

4.00 Life Circumstances and Strategies for Living

4.01 I don't read much since I met Anne. The Jonestown thing really got me depressed. If he can go crazy, I can go crazy--anyone can go crazy. The guy who pushed the girl off the subway platform, that got me depressed. I stick to sports. I read Cosmopolitan magazine . . . the psychology articles. I watch the sports on TV. A long time ago I really got into Sons and Lovers.

4.02 There was a while when I used pot only on Sundays. Then I got so tired of GM I took it every day. I felt guilty and scared. I tried to get off by quitting for two weeks. Now I only smoke on weekends. The doctor was very much against smoking. Smoking was doing me in. I enjoy being straight. I don't take any other drugs. Cocaine is the big thing now. I am not sure I can control myself, so I don't get into it. My wife smokes. A teacher in high school used to smoke with the students. I don't know many people who don't smoke. It's part of our society. I do it to relax.

4.03 If it weren't for Anne, I wouldn't have much to do. I just work and I have a nice lifestyle. Why should I work harder?

4.04 I used to have to smoke a cigarette after eating. That was bad for sports, so I quit. Then I got into pot. It was different, but it became a habit. I don't drink regularly. At GM there is a lot of pot . . . piles of it change hands daily. I was smoking out of necessity. I thought, what was I doing, so I quit. Others are working stoned at GM. I'd like to take a survey there some day. I wouldn't ask the kind of questions they usually ask. They never ask anything important.

4.05 A lot of people don't care about politics. I thought of running for shop steward so that I'm changing something. I'm too young for politics. People wouldn't take me seriously. I worked for Dutschka in Parkdale while the strike was on. My parents are NDP because they say that it's the workingman's party. I felt Dutschka was willing to do something, so I worked for him. I like to know what the basic issues are, what the parties stand for. Things should be more equal; people would care more for each other.

4.06 I hate to think ahead about my job. Later I want to look back and see accomplishments. I've met a lot of good people in the last five years. I've gone through high school . . . a very rich place. I've worked in an office . . . had time off . . . been on unemployment and know what people go through. I have a grievance at GM and I'm on sports teams. I regret not having gone to university, but I've gained in a lot of other respects. You learn every day . . . it's never too late. I'm glad I went to Grade 13, it leaves things open. Maybe I'll go to university at forty-five. I haven't missed the university, socially. Not moving away from home for university . . . maybe I missed out on that. I never had to support myself before getting married.

4.07 They always say the chicks are at university . . . but they're everywhere.

Comments

Carl looks back at high school with very mixed emotions. In many respects, high school was a very special place for him; he had experiences there which he has not been able to find since. He liked the intimate atmosphere, the sports, and the human relationships. However, it was also the setting for his frustrations with those in authority. Carl is very sensitive to being treated as a second-class citizen, to being treated in what he perceives to be a child-like manner. He talks about not being able to appreciate the potential of high school in terms of his own future because of the rebelliousness that was aroused in him by the arbitrary authority structure in the high school. (1.01, 1.10, 1.08).

Even though he finished Grade 13, he did not manage a successful move into university or community college. His grade average prevented him from entering the programs of his choice; on the other hand, he does not seem to have received guidance in seeking proper alternatives. Although he credits community college for being more professional and allowing for student growth, he found the size and the new freedom intimidating, and the course wanting. (1.01, 1.02, 1.07).

As an immigrant, Carl has been running hard ever since he discovered that there was nothing to be gained by being Portuguese. As he says, once he made this discovery, he never looked back. Only since his marriage and entry into the labor market has he slowly become aware of the advantages of being Portuguese and Canadian. He is in the process of relearning his early language and customs, and now states that there is an advantage to having been an immigrant, for it leads to trying harder, and gives you an added identity. (3.04).

Carl is holding down a high-paying job in a manufacturing plant, thanks, in part, to unionization. However, he has found a situation far exceeding the authoritarian character of high school. His response has ranged from private solutions to rebelliousness in behavior to seeking out the prescribed avenues of resolution. His present need for a high income has made his unable to simply quit and take a chance on a new career. (2.02, 2.03, 2.05, 2.11).

He wants to work with people, and has found a variety of ways of doing this. His problem at the present time is that he is isolated from interaction with people at work, although his nonwork life offers many opportunities, mainly through his interest in sports activities. He does not know how to unite his work and nonwork world. (2.11).

Ada

Ada is a university student who is looking forward to a career in journalism. At the moment, she is working in a brokerage firm full-time and completing her four-year university degree part-time. She is single and lives in Toronto.

1.00 Education

1.01 I'm a student at the U. of T., working full-time and completing the fourth year on a part-time basis. I'm studying sociology and English--a double minor. I like the concreteness of sociology and the creative aspect of English. The two combine nicely. I hope to go to graduate school next year and study journalism on a full-time basis.

1.02 The first year of university was very difficult. It was a shock, a jolt--the new community setting. The distances there and back limited my extracurricular life. I didn't have a group of friends that I'd known for years. Could I live up to the new academic expectations? It seemed so imposing. Later, it was easier and in the fourth year everything fell into place.

1.03 I ended up going to the U. of T. strictly because of the prestige. When I graduated from Grade 13, York was not well established. It didn't have a good reputation. I was an Ontario Scholar and was going to go to St. Michael's College and get a degree.

1.04 By Grade 13, the work load had increased and we were expected to behave like adults. For the first time there was a strenuous academic emphasis. We were expected to perform to a certain standard. Eighty-five percent of the students were suddenly being weeded out. We were marked more stringently; it was expected that you perform a little better; the work load was heavier. In the history course we had an essay every three weeks. I'd been used to writing one essay a year for each course. The principal lectured Grade 13 students that some were perhaps not "cut out" for this; that we had better "toughen up and start studying" if we planned to make it.

1.05 I planned for university from an early age--in junior high. I knew that I didn't want the four-year business/commerce course, but rather, the five-year arts and science leading to university. I was interested in learning. I was getting good marks all along. My parents pushed me . . . "we'd be proud of you."

1.06 I wanted to attain the award. Marks were important. I was a borderline case. I think my final average came out to 79.8 and my English teacher ended up boosting my mark in English so I would get the Ontario Scholarship. So it did mean something. I wanted it. I wanted that acknowledgment. I had worked really hard for it. But I think by then, the pattern was set. I knew I was going to go on, and I think just getting the award gave me the extra boost. You're somebody. You can make it. That feeling collapsed the first month of university, but at least I had it for the summer.

2.00 Work and Career

2.01 After four years in university you've done well, but then you're in a working world. Where is your practical experience and what do you know? Even if you get a job that you may not think is up to your academic qualifications, the fact that you do have that background automatically makes you stand out. And I do think that, even when I get depressed, I realize that that background does make you stand out.

2.02 I can't take, for too long, a job situation or even a social situation where I really feel intellectually frustrated; where I am surrounded by people that are not contributing any kind of stimulation to me at all. I'm trying not to make this sound too snobby.

2.03 My career is very important to me. I want a career. I will not stand for something less than a career which is entirely stimulating to me, that fulfills my creative and intellectual needs.

2.04 I'm in the situation now of trying to make some money to go back to school. I have a fairly good job, but one to which I'm not particularly committed. I'm constantly trying to find something more interesting and finding it very frustrating. I'm working as a sales assistant/secretary at a brokerage firm. I'm doing very well. I've been offered a promotion. I'm just not terribly committed to the job. I don't find it terribly stimulating. I don't like working with money. I cannot get terribly excited if Dome Pet. is going to merge with . . . really . . . although I know that several of my colleagues do. It's like a crap game.

3.00 Family and Ethnic Background

3.01 I'd had a lot of the old-world ideals from my parents, from their time and background. And you have to fight that. I think one of the reasons I embraced the whole women's liberation thing was to rebel against that. I mean, they never really said "don't go ahead and prove yourself"; it was just that there wasn't that much encouragement. You're the girl and if you choose not to get on, it's okay because you can get married and have babies and sit at home. It's okay.

3.02 I wanted to just rebel against this and say, "well I'm not going to sit here and wait for a man to come along, so I can be happy for the rest of my life." Even at a tender age I was beginning to see the misconceptions behind that strategy, and I didn't want to accept it. I think I was just a normal, healthy, red-blooded Canadian girl fighting back to what the parents were saying.

3.03 I was fighting my peers, too, because we lived in a very Italian district. All through high school and much of university many of my Italian-Canadian girl friends were saying, "Come on you really just want to get married and settle down." So I was fighting them, too. I was fighting their whole standard. It was very nerve-wracking. It surrounded me everywhere. It surrounded me in the home, at the school, and at the high school and university levels.

4.00 Peer Group

4.01 My peer group, until about the third year of university, didn't change very much. I think it was the case of a close-knit group of friends I grew up with and went to high school with, and the really close ones kind of made a pilgrimage to the U. of T. and, of course, St. Michael's College being very ethnic--fifty percent Irish, fifty percent Roman Catholic--it was really not until third year that I broke away from them; and to do so I had to break away from my college as well. I couldn't handle it any longer. I wasn't going to fight anymore. I was just going to go ahead and be my own person. I wasn't going to put up with the standard. The peer-group standards were there and they had to be fought against.

4.02 At the end of the second year in university a whole group of my girl friends went to Italy for the summer. I went out west--different, of course. That's just the way it worked out. When I came back I realized that I just wasn't going to fight against those standards anymore. My standards were what was right for me and I wasn't going to fight against it anymore. So I just became less dependent on the peer group that I had had up until they made friends that were out of that group. I had to become more independent because I found I didn't have a group to hang around with anymore. I had a friend here, a friend there, and another friend there, but they were not a group. They didn't know each other and it required being a lot more independent. Certainly the idealized views of a university of frats and studies--it wasn't that at all.

4.03 Going out west I noticed suddenly not being Italian. Something different being Italian in the west. I guess a new feeling. I began to get homesick.

4.04 When you come back, your perspective changes a lot. The Italian peer-group way of doing things is not necessarily the right way of doing things. Why should there be that constant necessity to fight it? So I just didn't, anymore. I felt a lot more relaxed with the friends I had grown up with. I was myself. My friends would say, "She had weird ideas, but what can you do?" After a while they just got used to the weird ideas, which really weren't so weird.

4.05 I had a couple of friends who did not date. Not because their parents were saying, "You can't date." My goodness, they were women! But it was more a case that they'd been brought up to think that you don't date just to date, to have fun; but you date someone you are seriously thinking of as a future. This was incredible to me. All I was doing was to just date. Nothing ultraradical about that. But you can see how, from their perspective, they would say, "we all know about her." And that's a university-educated crowd talking about a girl friend of mine who did go out a lot, and got the worst reputation just by dating in that peer group. Of course, you can take that even further in terms of sexual relations, and then once you do it--you're bad, that's all. You're no longer an intimate friend. They'd still be nice to you, but they'd know you were "one of that kind." Not an obvious ostracism, but there was just a quiet sort of feeling that you got. And no self-respecting human being will hang around with a peer group that labels him "bad," and actually accept that from them. You're also going to start believing that in yourself and you're going to say, "On the one hand, I do adhere to the belief that two people do not have to be married to engage in a sexual relationship, but on the other hand, I am intimate with a peer group that is telling me that I am "bad." And unless you want to start believing what that peer group tells you, you'd better just find yourself a peer group that agrees with your ideas.

4.06 After the initial shock of realizing that I didn't fit in anymore, I began to realize that they were a small community unto themselves, and there were lots of people that I could relate to intellectually and in terms of my beliefs about the goal that I had, and about relationships. I met with other people, friendships would develop, and through them, I met other people. It was a gradual process.

4.07 I have several friends interested in journalism; others who majored in English, sociology and now one in law school. One is a sales manager at Eaton's; a couple are traveling through Europe. And, of course, I still have the friends I grew up with, because since then, I've been able to come to terms with the whole dichotomy between what I believe and what they believe. On my part, there's an acceptance of them. And I think, on their part, the ones that were the closest to me have accepted it and the ones that were semi-your friends, but not really your intimate friends, are just a little bit more difficult, distant.

4.08 While I did have problems with my peer group here, when I went back to Italy I didn't feel them at all. I loved it, I fit right in. I expected to go back to Italy and find the sort of thing I had been exposed to up until then, the same kind of mentality and viewpoint I had found here. It was a real shock. I was 22. I expected a nation of people who would say, "you're bad."

4.09 I was really excited. Italy was young, vibrant, interesting. There were so many things to see, so many different kinds of people and, if anything, I thought the Italians made Canadians look sane and puritanical. I guess the peer group that I had been hanging around with here were the product of the small town, southern Italian way of thinking. Then they came here and they liked to think of themselves as Italian; to think of their views as distinctly Italian. When I went back to Italy I realized that those views were the views of twenty years ago and people there weren't thinking that way. They just legalized abortion!

4.10 The interesting thing was that when a few of my girl friends did go back that summer, they hated it. They couldn't wait to get back here. That sort of helped me to come to terms with it.

4.11 I was the kind of girl that, if my mother said, "You'd better not go out with Canadian boys," I would bring home blond, blue-eyed Canadians from five generations back. I just couldn't accept that part of me because that part of me was what I saw around me, and I didn't fit into it; I just said, "Well, that's it."

4.12 When I went back to Italy I really did fit in. I found it extremely comfortable and I felt that the friends I made over there, there wasn't the same viewpoint there was here. I fit right in and I really liked it. . . . It's a shock going back and forth. I'm torn between two worlds. I need a period of adjustment each time.

5.00 Life Circumstances and Strategies for Living

5.01 Money is a thing that changes after you graduate from university. In university, everybody's broke and you're all on an even scale. I have friends--my parents are immigrant working-class parents--I used to hang around with friends, one girl friend whose father was a professor at Ryerson and another whose mother was a doctor. . . . But the whole money thing . . . social class at university wasn't important; you related to people on another level. With this particular girl it was our interest in renaissance history. We related to each other on that level. It can develop from that to a personal thing. Once you graduate from university, all of a sudden there is this standard. I have friends who are going to be C.A.s, friends who are going to law school. All of a sudden money becomes really important, and I have to reevaluate myself. I have to think, "I know it wasn't important before." I know that before I would have thought, "Well, it doesn't matter how much money I'm making once I graduate. as long as I'm happy." Now it's starting to enter into it. I do want, for example, to be a journalist, but also want to be financially rewarded for it. So it's becoming fairly important, although I don't think I'm as status-conscious as some of my friends have become.

5.02 There are so many turning points in my life. I hope I can start getting into the kind of career I want, and things go into phases a little bit slower. I don't handle turning points well. Whether it's a goal you set for yourself, or relationships that come along, or the progression that your life goes through. Turning points are related to an individual's orientation. Some girl friends would classify their turning points in terms of their love relationships. Then there are people I know who are really into their jobs and their careers, and would classify life in terms of promotions. For myself, turning points would be a slight mixture of the two.

5.03 It's important that you are interested in a job and that you are good at it. It's important that you learn something from it all the time. The job's got to fulfill the intellectual, financial, and emotional needs that I have. You can't limit it to the intellectual and the financial. I think the emotional part is very important, especially in our society where you define yourself through your job, and especially for women now, too.

5.04 I'm a product of the whole feminist thing. It started when I was in high school. Certainly the women that I know that are ten to fifteen years older than myself seem to be coming to the same point of realization that I'm at. You don't have to remain homemakers. That's not the sole way of defining ourselves. Of course, then there can be a backlash. The good homemakers and mothers are beginning to feel inferiority complexes, which isn't right.

5.05 I want to be world renowned. Maybe just a national commentator on TV. I want a good career, a happy love life, the opportunity to do the things that interest me. I want to travel and meet the kind of people that I would find interesting. In ten years I'll be in Toronto, married, and a journalist.

5.06 When I was in Grade 10 or 11 I was reading feminist writings. I really grew up with the notion that you go out there and prove yourself. You don't have to sit back and wait to get married. There were a lot of women at my age level, that I went to school with, who really weren't into that whole "I'm going to define myself in terms of personal relationships, getting married, a husband, raise children," and that was the most important." But the point is that the whole feminist ideal was becoming prevalent at the time I was still a young teenager, and I chose to read them and partake of that whole way of thought. That's the way I was thinking.

5.07 I can remember watching TV. when I was very young and it was a debate on an educational channel between Germaine Greer and someone.

Comments

It is plain that Ada is quite articulate about her life and her perceptions of the events and forces that have shaped it. She seems to have shaped herself by resisting and overcoming the pressures from her ethnic group--family and peers--to conform to certain images of the woman in her society. (3.01, 3.02, 3.03, 4.01, 4.05, 5.04).

She seems to have taken opportunities for experience and turned them into occasions for learning about herself and others. Ada does not seem to have responded passively to the events in her life, but rather, to have turned them into points of change and action. (4.06, 4.11, 5.02).

Ada was supported in her intentions to achieve an education; she is now on the verge of having the prerequisite education for a career in journalism. In the process, she has demonstrated independence and resourcefulness. She is making heavy demands on her career, but has faced opposition before. However she will be moving beyond family, peer group, and university into a much larger world. (1.01, 2.03, 2.04, 5.03).

The various obstacles in her path have not destroyed her confidence in her abilities or her future. To the contrary, they have enhanced them.

Three issues are stated clearly. In the first place, Ada is adament about wanting a career (as opposed to job), that is highly stimulating and fulfilling. She is saying that this is her due, as well as a necessity. Her current job does not fit the bill; it is in the wrong area and represents everything she does not want, even though she is treated well, has promotions available to her, and receives a good salary. Secondly, in part as a result of this first full-time job, she has begun to appreciate and gain a new understanding of the advantages of money. Being properly remunerated has become important to her and will play a role in her future career thinking. (2.03, 2.04, 5.01).

A third theme emerging is the role the women's movement has played in Ada's life. It seems to have been an important catalyst in her development. Through the mass media, she was exposed to it at an early age, and it continued to impinge on her life. In a sense she grew up with the movement and has been shaped by it, incorporating into her life the expectations the movement has made available to women. (5.04, 5.06, 5.07).

Andrew

Andrew is a Grade 12 graduate working full-time at Bell and living in Toronto with his widowed mother. He is taking community college courses at night in an effort to upgrade his career opportunities.

1.00 Education

1.01 I have been taking community college courses since high school. High school isn't enough for what my goals are. I'm trying to get a better job, and courses look good on the record. I'm trying to improve myself, and courses are something I can fall back on. Job application forms always leave a lot of space for education; they only overlook your education if you're promising.

1.02 I started Grade 13, but got fed up. I got to the point where I didn't care anymore. It was a social thing because lots of my friends were getting jobs. Many of my friends were also older, and they were in university or they were traveling. I just didn't want to be in high school anymore. I quit school one day and got a job the next.

1.03 Choosing courses in high school was strictly peer pressure for me and most of the others. Or we took the easiest credits. There are very few kids in high school who really know what they want. I had no idea what I wanted. Some of them were pressured to find a direction by their parents. When you don't know what you want, it's good to be pressured in a direction. My parents didn't give me that pressure.

1.04 Father died while I was in high school. He didn't influence me much; Mother influenced me more. She was disappointed when I quit high school, but she didn't say I had to go back. It was in style, then, to do what you wanted to do. That was my attitude, but I've changed. I would have responded to directives from Father. I've found out since then what life is like. Two years ago I would not have come for an interview with you at the university. I've taught myself. I don't know why I've changed so much. I guess I learned a lot by not getting what I wanted after high school. I still don't know what I want. I'm not shy anymore.

1.05 I'm taking night courses in electronics. I didn't study that in high school, but now I'm interested.

1.06 In Grade 9 they give you the choice of two basic programs: reading and writing, or hands. I'm a technical man. In Grade 9 you take all the subjects, but by Grade 11 you specialize. That's OK in some ways, but looking back now, I miss not having taken a particular course of study. The technical course led to university if you took it for five years. I would have had to make the decision about a four- or five-year course in Grade 9, but you could change later. I wasn't qualified to decide what course sounded nice. It's difficult to make the decision without parent guidance. I should have taken all the core subjects . . . reading, writing, mathematics. I wish someone had advised me. I did best when I got encouragement from teachers. A lot of teachers are just doing a job.

2.00 Work and Career

2.01 I quit school one day and got a job the next. I went to Manpower. First I drove a truck, and then I worked at the order desk of the same company. Later I worked in a furniture factory putting legs on chairs. I worked there three days. Then I got a job as an expediter for a radio manufacturing company. I had quite a lot of responsibility there. I was promoted to the sales department. After three months I was laid off. I started work at Bell right away, and have now been there for nearly three years. It's a good job and challenging enough. But I'm still bored now. It's an entry job . . . it's repetitious, but good. I am dealing with money.

2.02 I don't want a $10,000 job. I want to get into management, something like that is more interesting. Twenty thousand isn't very much these days. I'd like to go to the opera, have a cottage . . . enjoy myself. I see how comfortable some of the people in the Bell are; I don't want to worry.

3.00 Family

3.01 I live with my mother; my father died three years ago. Mom is retired. It's convenient to live at home. I contribute money for expenses, but I can save. To save money I also participate in Bell stock payroll deduction. Father died while I was in high school.

3.02 I'm the youngest of three. My oldest brother is thirty-five and the next oldest is thirty. I'm a little apart from them. I go to my oldest brother for guidance. He finished university and has a very good job with a construction company. I hope I'll be like him. He's got two kids. I don't see him as often as I like because I can't really join in, I can't party with him; I would feel out of place.

3.03 The family has a cottage. My older brother brings the family up and my mother comes too, and I come up there with my girl friend. We take turns being there. My older brother went back to school. He was quite old when he went back because he had to finish high school. I wasn't living at home. He was living with the grandparents. My other brother went to trade school. He had dyslexia and so he couldn't read properly. He was very good with his hands, so he went into printing. Later he saw how well the machine service people did, so he went into the servicing of printing machines. Now he's got his own territory in Calgary. He's a go-getter.

4.00 Life Circumstances and Strategies for Living

4.01 I don't read very much; I don't know why. It's work for me. I didn't read much in school. Reading doesn't interest me very much. I might read two books in a year.

4.02 I get away on weekends. Each night there is something going on socially. I love friends. I go swimming.

4.03 I really like to finish a job. I try to do my job well, and I try to improve. My parents were very, very honest. People haven't done too much wrong to me. Enough good things have happened to me.

4.04 The outdoors are important to me. My girl friend, with whom I've been together for three years, goes out with me. I wouldn't have gotten to know her if she weren't interested in the outdoors.

4.05 A go-getter is someone who sees something that needs to be done and doesn't wait for someone else to do it. I at least see one to recognize one. I've been more of a go-getter since leaving high school; I don't know why that is.

4.06 I have a cross section of friends. Some have no intention of looking for a job. I've got one friend who lost his ambition and got fed up with his job. I can't explain it. He dropped out of Grade 10, but later got a pretty good job and kept it for about five years. Then one day . . . that's it. I wouldn't do it. I hate to see myself doing the same job for twenty years. I keep hoping something will happen. I want to be in the big time. I don't know what I want. Money is an easy goal. I haven't thought about what I'll be. I like responsibility, but I have to be rewarded for it. I like to be depended upon. I was usually very well rewarded at home. My mother was very nice about it . . . I just lap it up. It encourages me.

4.07 I won't do something for a boss just to be nice. That's ass-kissing. I want to get ahead by showing I can do the job.

Comments

Andrew is stuck at a certain level in his job and wants to find ways to move up. After several years in the work force, he knows what he should have done and did not do in high school. There, he paid little attention to the future implications of his choices of course and program. He relates that he received little guidance. (1.06, 2.01).

Andrew does feel he has learned much about life and himself since leaving high school. He feels that one of his main achievements has been the greater value he places on aggressiveness, with respect to opportunities; he feels that he has become more aggressive. He implies that he has made the transition from a drifting to a more purposive mode of life. He quit school just as he was beginning Grade 13, took the first available job, and has gone on from there. The Bell job has been his first steady work opportunity, one which he hopes to make the basis of a career. However, he is not at all sure he will succeed in moving into the management positions he wants. It is the purpose of the part-time night courses to make these positions more accessible. (4.05, 2.01, 2.02, 1.05).

In retrospect, Andrew has realized that the education he received (and, to some degree, chose) forced a choice on him of "reading and writing, or hands." He is now trying to change direction, partly because of his boredom at work and his ambition for the "good life." He was originally headed for "hands." (4.06).

The examples of his friends and relatives--especially his older brother--and the effects of being "out in the world" seem to motivate Andrew to persist in his attempts to upgrade himself. A desire to be out in the world led to his leaving school; being out in the world seems to have helped him come back to school. However, although he is aware of the benefits he might derive from further education, he is relying primarily on his present employer. This might leave him quite vulnerable, but will provide a good test for his persistence and newly acquired go-getting self. (3.02, 3.03).

Andrew's family seems to have been behind him all along, but not willing or able to provide specific direction at several crucial points in his life. His survival so far, and the string of positions he has held, attest to a certain initiative. It is his values and goals which have undergone change, and his knowledge of what it takes to achieve them.

Rose

Rose is married and the mother of two. She lives outside a small town in eastern Ontario and is staying home until the children are older, although she works part-time helping her father with his business. Her husband has a promising job in a local manufacturing plant.

1.00 Education

1.01 I'm not able to sit down and work on one subject for more than thirty minutes. As a result, high school was pretty tough. Maybe because there was no writing involved, I really enjoyed theatre arts.

In my last year, I directed the school play. There was one other good class and there the teacher made the difference . . . it was the business course and I had it all four years. Everyone thought he was terrific.

1.02 Grade school was different and I enjoyed it. High school was difficult because I moved from a small country school to a big school. In grade school I had the same teacher from Grades 2 to 6, and I knew the whole class. We had a junior high school, but it, too, was small. The big change for me came in Grade 9. I took only commercial subjects, so I only went as far as Grade 12.

1.03 The theatre experience was the high point in high school. I haven't followed it up since then. I've watched the ads in the papers, though. I can't act, but I would love to be involved in the theatre. The Theatre Guild in Tweed never got off its feet. I'd like to organize a theatre. I was lucky to be in the first theatre class. An English teacher started it. She was great in theatre, even though she had a very bad reputation. It was the only year that half the class was boys; usually it's all girls. We did research on plays, we made the set, and we designed and sewed the costumes. I loved it.

1.04 I'm against being able to pick your own courses; at the time you have no idea what to take. If you miss history, geography, and sciences you miss it all. I don't know why they switched to choosing your own courses. In Grade 9 there were only two options, but there was total confusion in the classroom. The students did everything possible to stop the teacher from teaching. At the time, I thought it was smart to take all the commercial courses. And my parents never said much; they just signed the forms. Mom was all for the commercial subjects. She thought I would get married and stay home for the rest of my life.

1.05 The high school district was huge. I didn't get to know the teachers except in theatre arts. There were good things about the high school, too. I'm glad for that.

1.06 My husband finished Grade 12. He's got good prospects at his job, but he wants more education. He feels that education would advance him more quickly. But I feel that experience would be more important. I've got a friend who went to college, but can't get a job . . . because he's got no experience. It's the people you know.

1.07 You've got to have the basics . . . English and math and science.

1.08 There's good and bad in going to a small-town school. But I'll never regret going on to high school. Without being able to meet people, it would have been like being locked in a cloister. There were cousins enough around home, but I didn't know anybody in high school. I was really scared the first day.

2.00 Work and Career

2.01 I went to work at the Cobourg General Hospital as a supply distribution technician. After six months I found out that no skills were needed for the job. The minimum qualification was Grade 10. There was nothing to the job.

2.02 My father owned his own lumber business. When he made it into a corporation in 1974 he needed a secretary, so I went to work full-time for him. At the hospital you just did your job, you didn't deal with people. Working for my father, I'm on my own. I have to decide when to do something and what to do. There's bookkeeping, ordering parts, there's something of everything. Yeah, I felt a part of the enterprise. I was never able to talk to my father and now we discuss finances. If I had not worked for him, I would not have known him.

3.00 Family

3.01 There were six children. I was in the middle. The oldest worked for father . . . he's now taking a course in timber scaling. He'll be returning to my father's business. The youngest is still fourteen. He also wants to work for father. There's still another brother who works for father. My oldest brother finished Grade 10 and my older sister studied art for two years in Port Credit. One of my sisters didn't finish high school.

3.02 My oldest brother didn't get along in school. He was six feet tall. But he's done well since then. He graduated with honors from his scaling course. He's married now. This business is family. My father's brothers all worked in it. Dad is a standard, old-fashioned man. Women should be at home. But now, working for him, he treats me like one of his sons. He can't understand it when I don't spend extra time at work.

3.03 I went to Edmonton one summer. I've never been south. I've seen a lot of Ontario. I haven't traveled with my parents. I have a sister in Edmonton and we've all gone out to visit her.

4.00 Life Circumstances and Strategies for Living

4.01 I've been at home since my first child was born. I'll be home till both go to school. I don't have any plans for the future yet. I'll take a job for awhile so we can build the house we want. I'll get some kind of schooling. I don't want to be in bookkeeping all my life. I'll go back to high school to take science, art, and mathematics. I want to make something of my life. I don't want to just be a housewife. I don't know what I want to be. It would be nice to get something where I can be at home.

4.02 Grandmother lived with us. We had a very sheltered life. We were of Irish descent and most of our friends were Irish Catholics. I married a conservative Protestant. I was the one in my family who made the transition, and I ended up the joker in my class. I figured that if I laughed, no one would notice me. I'm not a very feminine woman; I'll do any kind of work. In junior high school my two best friends were boys. My friends were two boys and three girls. In my family, I got along best with my brothers; I always felt easier with boys.

4.03 We used to read the religious books my parents brought home. We talked about evolution and got our parents all upset. My older sister brought home books a lot. She was very artistic and wanted to travel around the world. She lives in Calgary and takes courses in art. She's taking a trip to Africa this year.

4.04 We didn't know enough to appreciate history courses. My older sister taught me a lot, more than I learned in school. She's thirty and going back to university. She buses all the way to Edmonton from Calgary. Dad wasn't able to go to high school. Mom used to like English. Dad encouraged high school. My husband is fantastic in history. His only reading is in history. He reads an average of three books a week. I want to understand what he's talking about. Our kids are going to get a very different education than I did.

4.05 I'm waiting for the kids to grow up so I can do things. I wanted to have the children and watch them grow up. I want to do more for them than my parents were able to do for their six. It's nice to be able to help them. Our kids have opportunities we didn't have.

4.06 I have a hard time talking to educated people. I feel stupid. I would like more education. I want to talk at the same level. My vocabulary is really poor. It takes so much time to get that education, and you don't get far on it. I don't want to be a professional, I don't have the time. I sometimes feel inferior . . . I'm not satisfied with home and children. For my mother, home and children were enough. Nothing more was expected of her. I want to show my husband that I can do more. So help me God, I'll prove it to him. My husband encourages me . . . he isn't threatened. He amazes me in so many ways. He could take care of the house and children. He cares for them every Wednesday and Monday nights. He's really good with them. He helps with the housework. He's so unlike my father. Father's able to include me now, but I had to really show him that I wasn't just a woman. I was afraid that as I grew older we would drift even further away, but that hasn't happened.

Comments

Several things stand out with Rose: her suspicion of structure; her determination to be the equal and a collaborator of the principle men in her life; and finally, her determination to develop herself more fully.

In her education several things stand out. First, she had to make quite a transition from public and junior high school to high school itself. The shift was a matter of scale: more people, longer distances, and greater complexity. She looks back on the shift as painful, but beneficial in the long run. Secondly, there was the theatre arts course. This stood out for her because its manner suited her so well; the course stood in stark contrast to all the others. She speaks of her frustration with the rigid routines of high school . . . a theatre arts course worth its salt breaks all these routines. Thirdly, there is her dissatisfaction with the sequence of courses she took under the free-choice system. She has come to see that certain course sequences would have benefited her in terms of her present needs and aspirations. She is ambivalent about the free-choice system, pointing out that in school years in which there were no choices, the class room was chaotic. (1.04, 1.01, 1.07, 1.02, 1.08, 1.05, 1.03).

Rose's relationship with her father is significant in her life. One of her accomplishments has been to evolve a relationship with him in which there is give and take. The norm seems to have been that, partly because of the crucial role of the family business within the life of the family, the sons have had the important links with the father. Her mother has played the traditional role, for which the daughter was also being prepared. Rose has made breaking out of that mold a central theme in her life. She has chosen a husband who, on one hand, really needs her and her family, but on the other, seems to adhere to the egalitarian customs of modern marriages. She has managed to make her father take her seriously and, in fact, to treat her as if she were one of his sons. (3.01, 3.02, 4.02, 4.06).

Rose and her husband wanted the two children. Rose wants to raise children differently from the way children were raised in her family. In terms of her own personal development, her children and her husband are important participants. However, she also wants to build a life of her own through further schooling, even though she is aware that there is no necessary link between further education and jobs. She has had experience with jobs (including her present work as bookkeeper with her father), which are undemanding and repetitious; she is not satisfied with them. She has a model in an older sister who, when younger, added stimulation to her family life and is now making real sacrifices to pursue her interest in art. In spite of Rose's feelings of having been limited by her family and upbringing, there is recognition of the positive impulses and tendencies within it. It is almost as if the family demands achievement of its members, though it continues to provide closeness and a central focus. The resistance of the parents seems to have had the consequence of stimulating at least some of the children to overcome limitations. (4.05, 4.06, 4.05, 4.03, 2.01, 2.02).

Joyce

Joyce works as an administrative assistant in a provincial government department. She completed her formal education with Grade 12, but is presently taking night courses related to her work. She is single and living in her own apartment in Toronto.

1.00 Education

1.01 Originally I had planned to teach high school history. Over the years my plans changed. In Grade 12 I thought of becoming an air traffic controller. That too changed. Upon leaving Grade 12 I went to Seneca College, into the law clerk program. However, I found out I had to have a particular average to get into this two-year course. After a great run-around they said it would take me three years to complete the program. With that, I decided not to go back.

1.02 I missed university at first because a lot of friends went. They had a good social thing. But now none of them are doing anything interesting. Of those who went, one is now a hostess, another works for

McDonald's. They have nothing over me in practical terms. As I see them, most of them have not matured. It seems their university experience promoted a lack of initiative. After I left school I accepted the working world, and the changes involved. For my university friends, this transition has been difficult.

1.03 I would have liked a university degree, but now I see that differently. A friend of mine with a B.Sc. looked for a year for a relevant job. A lot of school kids are getting nowhere. It seems they think the world owes them something . . . that's idiotic. University ruins people; they should get back to basics.

1.04 I would still like to be a history teacher someday, but not now. I've always wanted to teach. Now a lot of my work is personnel . . . I'm taking night courses at the U. of T. in public relations. Earlier, when I started, I took night school, but then it was impossible. I was eighteen in a thirty-seven to fifty-year-old crowd. I couldn't relate. But now it's fine. I have never regretted working full-time.

1.05 School was great. I can't complain. It seems anyone who went to school after high school hated it, those who didn't, loved it. I think that was because of the discipline. It seems that from June to September, between high school and university, there isn't time to become responsible. But I guess I shouldn't generalize . . . I don't like to.

2.00 Work and Career

2.01 After Grade 12, I decided to get a full-time job. My first job was as a steno in an insurance company. I worked there for five months. I hated it--the work, the people, and the company. I left that, and went to another job with the Ontario government.

2.02 There, I started as a secretary in Community and Consumer Relations. I worked at that for about two and one-half years. Now, for the last two and a half years I've worked as administrative assistant to the operations manager. I really enjoy the government job. There are no restrictions; there is room to move.

3.00 Life Circumstances and Strategies for Living

3.01 I have a lot of good friends, most of whom are neither from high school nor work. Summers are tennis, and in the winter I ski. I don't like bars. I meet friends through friends. I like to keep work and friends separate. When I first started I did the bar scene with my workmates. That didn't last long. But that time was an experience, because everybody was four or five years older. I learned about a different world.

3.02 I've adjusted well. I think I'm better, for having worked five years, than my school friends. They work eight hours and bitch for the other sixteen. When you're eighteen, "partying" sounds great. But soon, realism and seriousness cause you to see it differently. When I entered the work force out of Grade 12 I was so green and so socially vulnerable. My values changed. In high school you want to be independent. Then you're confronted by somebody who's thirty years older and you see you might be wrong. Participation in the world teaches young people who are careless about their responsibilities. I think I have a greater sense of responsibility than my friends. I'm not saying life should be regimented, but somewhere before twenty-five one should realize responsibility.

3.03 I'm very conservative. Change is OK but . . . in high school I went around with the drinkers, dopers, and the frat crowd. I wanted to be independent and I guess I was a little old-fashioned. Over the last five years I've become less liberal, I think. It bothers me that fifteen-year-olds are rude . . . they have mouths like truckers. Nobody has a youth anymore. There are no choices. Just cliques at high school. Then, too, there are my friends who don't work . . . I feel ripped off.

3.04 I'll get married someday. I'll have a house, a color TV . . . there's nothing wrong with that. My friends want a log cabin and rabbits. Socially I'm successful, but not quite sure where I'm going.

3.05 I want to be successful. If I could have a life like my parents . . . a house in the suburbs, but not necessarily money; if I could have friends like me, friends I like, and a happy home life. And in ten years time I'd like to continue to enjoy the things I enjoy now . . . friends and family.

3.06 The most important influences in my life have been God, mother, father, brother, present boy friend, and my friends. With those, everything has worked out.

Comments

Joyce's life is very set, on the basis of her telling of it. She has a job with some room for movement; she feels that by going to work right after Grade 12, unlike many of her friends, she has grown up faster to be a responsible adult; being a responsible adult means adhering to the norms of the work place and the older generation, insofar as it is hard-working and dedicated to orderliness. She wants the conventional rewards for hard work, similar to those she sees her parents as having achieved. (1.02, 3.05, 3.04).

For whatever reason, she is remarkably insistent on the benefits of not having the university experience and degree. It is almost as if she has defined her life in opposition to those who have gone through the university. (1.02, 1.03).

She defines herself as being conservative, having outgrown a previous phase in which she experimented with a different lifestyle. She experimented earlier because she saw herself as "old-fashioned," but now has returned to her older self with a strong sense of who she is. (3.03, 3.02, 3.01).

Diane

Diane lives with her parents above the family jewelry business on the main street of a small eastern Ontario town. She went to Grade 13 and completed a course in journalism at the nearest community college. Since graduating, she has worked for the local newspaper. She has applied to university and is planning to attend at the start of the next academic year.

1.00 Education

1.01 It was hard to get to know people in high school. It was a large school, but I had started my schooling at a small local public school. For high school, we had to travel to another town and a very big high school. We went by bus and it wasn't all that great. The school was too big. There were a lot of different groups in the school and it was hard to get to know people. I couldn't stay after school, which meant I missed all the sports and other after-school activities because I had to catch the bus. I just didn't like high school. My course was journalism, and I liked art and English. I had lots of courses in English. I liked to read.

1.02 I didn't have to make a decision about Grade 13. I didn't know what I wanted to do. My parents pressured me into Grade 13, and so did my friends. I'm glad, though, that I went.

1.03 I took some commercial courses; I wished I had taken more math. I did take a little science, but I wished I had taken more of that, too. I had only Grade 4 math, and I didn't do well in it.

1.04 After Grade 13, I went to Loyalist College. I had a ride each way, and that worked out fine. The college is lacking in spirit now, but it had it when I was there. I made friends, more so than in high school. I was more mature. It was different. The teacher treated you better . . . not like a kid. It was a two-year program in communication studio technique. As part of your credits, you were placed in different communities. I still want to go on and get more education.

1.05 I've applied to universities . . . Brock, Trent . . . but I want to go to Carleton. But I'm worried because I haven't heard from Carleton. Carleton is strong in journalism, and so are Ryerson and Western, but I don't want to go as far as Toronto. I have a friend at Carleton and stayed with her for a week.

1.06 We should have had smaller classes in high school and a smaller school. Size gets to me the most . . . not knowing anybody.

1.07 In college, a teacher in journalism was helpful to me. He took a sabbatical at Carleton this year. I'm a little bit in touch with him; I go back to the college every once in a while. No one impressed me in high school, except for one English teacher who really knew her stuff. My parents will help out with university and I have savings. I'd like to pay my own way. I've always tried to pay for my clothes and all the rest.

2.00 Work and Career

2.01 I went to Grade 13. I'm glad I did. It's easier to go to university. I worked for a few years after high school. I'm still working at a newspaper. It's across the street from where I live. I do everything there. I got the job after a college internship there. I was interested in journalism and English.

2.02 I'm tired of working. It's the same thing over and over again. I would like to try getting into university again.

2.03 There are a lot of advertisements in the newspaper I work for. That's how it survives. It's a local paper for the town. I stay in the office and do the typing. I'm trying to get away from that. I'm bored and sick of it. I know the whole operation. The wages aren't great, but I live at home. The paper needed a typesetter more than anything else, so that is what I did.

2.04 I worked in the family store, but the newspaper was my first real job.

3.00 Life Circumstances and Strategies for Living

3.01 I don't want to settle down in Tweed . . . I want to get away . . . where there is more to do. I go bowling just to get out of the house. It's depressing here in the winter time, but it's better in the summer. I don't belong to any groups or organizations.

3.02 Most of my friends have moved away. Some are coming back, though. I don't have too many friends. There's pressure to get married, but I can't be bothered. I'd rather get more education and save some money. My brothers are educated and I'd like to be, too. I haven't learned enough . . . I've reached a stalemate in my life. I'd like to get away from here. I want to meet more people and live in a bigger area. Life isn't exciting around here.

3.03 The newspaper I work on doesn't take a stand; it doesn't get involved. I want to get involved. I want to write. I care about women's rights. I got interested in the past couple of years in feminism by reading the newspapers, books, and just by getting older. I'm not really that strong about it.

3.04 Am I crazy to think about university? Do you think I'll be too old? I want to meet people and join organizations in college. My brother is smarter than I am. I got put down a lot, I think; I always had doubts about myself. I've always been that way . . . quiet, I guess. I can't really say why I am this way.

3.05 The idea of going to university is what kept me going for the last two years . . . just getting away. I'll go to some university . . . no matter which. I really want to go.

3.06 I'm not religious . . . are there really religious groups on a university campus? I can't believe that.

Comments

Diane is ready to break out into the wider world; it has been a slow and painful process for her. She has been doubly protected, first, by the intimate small town in which she has grown up; and secondly, by a tightly-knit family who felt she was not ready for university. Now she is impatient to leave her family, her town, and her job for a university career and a place offering more stimulation. (3.01, 3.02, 2.02).

It is part of the circumstances of her life that, from an early age, growing up has meant moving away. It began with the seemingly traumatic move to the central high school in another town, and continues now with university, which invariably means moving even further afield. (1.02).

For Diane, community college was a stepping stone that allowed her to try out the larger world in miniature, so to speak. She could stay at home and participate in a college situation which was only once removed from her high school experiences. Community college was also effective in finding her work in journalism, an area she wished to cultivate; but the job was literally across the street from her home. She feels she has outgrown the local newspaper and must move on. (1.05, 2.01, 3.03, 2.03).

Numerous factors contribute to her anxiety about moving away: an unfamiliarity with larger cities; feelings of inadequacy regarding the demands of university and a career; and some concern for the effect of her age on her university experience. While she does have the example of her brothers, she feels they are part of her problem insofar as she was the little sister and the girl in the family. (1.06, 3.04).

It seems that, in spite of her difficulties in stepping out, she knows what she needs and has been able to take steps to broaden her experience of life. She communicates a sense of being driven in her need to get out, and to find a life of her own. (3.05).

Walter

Walter has a full-time job as a computer programmer in a large oil firm. He is finishing his degree in computer sciences at Scarborough College on a part-time basis, having dropped out of university after his second year. He is single and lives in his parents' home in Toronto.

1.00 Education

1.01 Secondary school was inadequate. The discussions I have had with others have confirmed this. University courses assumed knowledge that was never covered in high school. I had to catch up from day one. I just wasn't prepared. This isn't an isolated opinion. The professors I have talked to agree with me. There's a lack of communication between the high schools and the universities. I went back and checked with my high school afterwards. I think that high schools and the syllabus issued by the Ministry of Universities are to blame. The breakdown in communication means that people are set back in terms of their potential. That's what happened to me. But I also had a hard time concentrating, and that has made it harder.

1.02 I'm working full-time. I dropped out of university partly because my marks were low. Now I'm in a career where I need to study all the time. University did teach me good study habits and how to do research. I have to learn on the job and for that, university gave me an edge. I started at university and I want to complete the program. For me, it's a matter of self-worth. But the degree is valued in my field. You have to produce that piece of paper; they seem to value having stuck it out for four years. In my case, going to Grade 13 and to university was a predetermined fact. In Grade 9 I had decided to go to university. Early on I saw that Grade 12 would be too little. I went to Scarborough College because it was close to home. I wanted to go to the University of Toronto and Scarborough was the logical choice. I had the opportunity to go to Waterloo. In hindsight, it would have been better to go there because I would have gotten away from my friends and been able to concentrate better.

1.03 Going to university straight out of Grade 13 wasn't a good idea. A break to see some of the business world would have been good. But if you want to move above a certain level, you need that degree. You have to satisfy the corporate attitude toward the university.

1.04 When we were in high school we looked to the university; now you see some moving along without the degree. Many university students expect to find jobs automatically, but that's not the way it is. You have to start at the bottom. University students come to Shell and want to start at a certain level. As a result, they don't get the job. I think that you should start at the bottom, because you've got to know the jobs below you. University students want the top-level jobs, but they should have had the lower-level experience. Universities have fallen down on their counseling. They emphasize things like resumés and interviews. But there have got to be seminars to learn to accept the lower-level jobs. University courses are fine, but they are theoretical and have to be expanded to include the practical. I've learned through my job experience that you need both.

1.05 Because of my job, I've got a better appreciation of what's being said in my economics courses. Now it's not just another course, another credit. In computer science, I'm finding that my textbooks are outdated. The material I use day by day in my job is about five years ahead of what is used in class. Because I am able to complete assignments at work, I could work at a higher level than other students. I feel I learnt more than I would have otherwise.

2.00 Work and Career

2.01 My sense of direction has come from the experience I have had. I had part-time jobs that allowed me to evaluate the jobs I did not want. I always saw computers as a puzzle. I wanted to go into a stable career in computers. In programming, a puzzle is presented to you. When you try it out, you create something new. You have to arrive at a solution; it's a problem in logic.

2.02 I started at a low level. Now I'm up to operating the job. I supervise eight people and write programs. You move ahead by changing jobs. That's how you get the salary increases. But without a degree, they won't move you any further. The company has an education program, but they don't tell you what to study. They'll pay for part of the course once you complete it, but there's very little actual encouragement to study.

2.03 There are very few courses in the evenings, and that is very hard on part-time students. I'm on shift work, so it's a little easier. Shift work is a pain in the parts. It disrupts social life, and you're not as effective on the job. We have a three-week rotation system--each shift lasts one week . . . there's a perpetual jet lag and you never catch up. I worked at the Bank of Nova Scotia for four months, and there we worked three days and took the third one off. I would never do that again. There was lots of dissatisfaction; you were effective for ten hours, but the last two were not effective, and mistakes are costly.

2.04 There aren't too many people to talk to at work. I talk to the part-time university students. They always need lots of advice and help; they think I have it easy taking just one course each term. Actually, it's very difficult fitting the course into the job schedule, and just getting to the course is a problem.

2.05 My job is interesting, but it isn't a challenge anymore. Even though I know the job, I'm always striving to improve myself and to learn more. The people who sit back give me the impression they don't care. Some university students don't care. I might have been just like them, but three years in the working world has changed my opinion drastically.

2.06 I'm not being rewarded properly in my job. My argument isn't money, just to be paid enough. But when I'm doing a job up here and someone else down there earns what I do, I get upset. There has to be a differential. I've been in this job for three years, and if I go into full-time study next September, I'll quit. I've saved enough money.

2.07 I've considered moving to the States or out West. Toronto is one of the big centers in computing and there are very few of them in Canada. There're many more in the States. I subscribe to magazines which give me information on jobs. I'm not a company man in any shape or form.

3.00 Church

3.01 I'm at the United Church. I sing and tour with it . . . that's my major outside activity. I also take an intense bible-study program. It's a two-year course led by trainers; we are reading all sixty-six books of the bible. My major interests have changed since the first year of university, when Christ became an option. It happened through friends. I was invited to some activities. I saw that what they were saying made a lot of sense. It was very much an option.

3.02 I socialize with the group that I sing with and I also take the course with them. I teach Sunday school. In high school, no one went to church; then, in university, a mutual friend brought us around. The group I'm with now come from different directions. The highly committed aren't a minority in the church. We're more like a traditional church. It's not a cult. It's very much your traditional setting. You wouldn't notice the difference on a Sunday morning. There's no controlling done. A number of different programs need volunteers, that's all. It's an individual commitment to Christ. Fellowship with a group of others is a part of it, but a great deal else is also involved. I decided to see the option in the same way that I formed opinions on other things. I listened to their opinions, compared them to my own, researched it. It wasn't an overwhelming emotional experience.

3.03 The singing group goes all over the place. I was in England for a few weeks, and we were in the States a few times. We sang in prisons. Once prisoners have done their time, we have no right to judge them. We must listen to them; they have a right to be listened to. What they have to say may help society. You never know where you will find the key.

4.00 Life Circumstances and Strategies for Living

4.01 My parents let me make my own decisions. They would have been disappointed if I had not completed Grade 13, but there wasn't any pressure. My parents never forced me to go in a specific direction. They didn't force their opinions or wants on me; there weren't any ultimatums. I learned from experience.

4.02 I read for courses, and I read computer manuals. Most of my time is used for work or courses. I read one newspaper, especially the articles related to economics.

4.03 I stand up for my rights. I don't like to be crossed. If I see something that's not right, I do something about it. If you get stung once . . . at the Bank of Nova Scotia I was interviewed for one job and hired in another. I left there as soon as I could. I've always had the opinion that if something is wrong you don't remain silent.

4.04 In a conversation, I listen to others. I form an opinion on the overall content of the talk because I want to get the full picture. That keeps you out of trouble because you don't take things out of context. You learn more by listening to the opinions of others, comparing them to your own, evaluating them. I've been able to make a contribution in this way when someone is in trouble.

4.05 I'm diversified, but organized. When you are in shift work, you have to make up your mind whether it will get the better of you. You have to try to get as much of a social life as you can outside work. You have to make concessions. Some people just sleep in between shifts. I don't like sleeping past 1 p.m. because I feel I would waste the day. I try to salvage as much of the day as I can.

4.06 I have radical opinions. People have to learn to listen and appreciate other's opinions. There are very few good listeners. You have to teach people to think. You have to be willing to learn. It doesn't matter who anyone else is, everyone can learn from someone else.

4.07 No one influenced me especially to be the way I am. Everyone has different qualities. You have to look at the ideal and strive to come as close, in your way, as you can. You have to be able to recognize people.

Comments

Walter is a deliberate, careful person who has learned, through his experiences, something about how he wants to lead his life. He has articulated a coherent philosophy of his own way of dealing with life. Even his religious experience, he claims, is rational, not primarily emotional. (3.02, 3.01, 4.04, 4.05).

He feels that his poor performance in his initial university career stems from the poor preparation he received in high school and his difficulty in concentrating. He thinks the latter problem would have been overcome had he chosen a more distant university and thus, had fewer friends to interfere with his work. (1.01, 1.02).

Looking back, Walter feels that a period in the "real world of business" after high school would have benefited him in terms of his appreciation of university. He has become a person who highly values learning from work experience. His work and study in the field of computer science complement each other nicely. (1.03, 1.04, 1.05, 1.02, 2.01).

He readily admits that a university degree is generally useful and, in his case, required by the "corporate world" for promotion. He mentions that study and research habits learned in university courses are useful to him in a job that requires continuous education. He criticizes universities for leading graduates to believe that it is not necessary to begin a career at a low level. Walter holds strongly that graduates need--and should expect--the lower-level experience, in order to work competently in the higher-level positions they want now. (1.04, 1.02, 2.03, 2.02).

He has organized his life carefully and is able to do a great deal with his time, in spite of the generally debilitating nature of shift work. He is, for instance, going to great lengths to finish his university degree. (2.03, 4.05).

Walter believes that merit should be rewarded, and is not tied to a particular company; rather, he looks for better positions and higher salaries. (2.02, 2.07, 2.06).

THEMES AND ISSUES

In considering the texts of the interviews, phrases and sentences jump out that demand thought and analysis. We have selected a few instances as a jumping-off point for discussing matters that relate to a number of the interviews and reflect concerns expressed elsewhere in this report. Our intent is to show how a general topic has a different emphasis for each person.

"Unless you do it, you don't know it."

The issue of the practical life arose in many different guises. Joyce feels that experience is the only route to responsibility and adulthood and expresses a mixture of envy, contempt, and pity for her friends who chose the university and community college route to a career. John, from early in his school career, has mixed the practical with studies and is continuing to do so. He did not let adult advice get in the way of his feeling that experience in the real world would benefit his life, even at the cost of academic learning. Janice has incorporated involvement in the real world with her thinking about teaching and education, and has made it a basis for criticism of her own education; she feels that the most valuable part of teacher's college was the practicum. Greg was prevented from taking a year off after high school, when he felt strongly that he needed work experience before going on. By failing a year and dropping out, he finally got his year off, and now feels it was the best thing that ever happened to him. Walter is finishing his B.A. in computer programming and economics, while carrying a full-time job as a computer programmer. He feels strongly that this gives him an advantage over other students in his program. He is critical of universities fostering the illusion that graduates do not have to begin at the bottom of a career line. Andrew left school after Grade 12 because he felt he had had enough and needed to get into the real world; but he also says that his years in the job world taught him the importance of education being handled carefully and with foresight.

In reflecting on what our people have told us, there seem to be two main ways of viewing the position of practical experience: in opposition to academic experience or in a complementary relationship to academic experience. Some are saying that both are needed; others are saying that one gets in the way of the other, or at least has in their

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case. Each individual has had problems with the relation of academic learning to the "real world." The problems have varied as have the consequences on people's lives. It seems certain, however, that much was left to chance, rather than given considered thought, during the several crucial points in each life.

"I'm pretty satisfied with my life, but not with my job situation."

What happens when individuals are not satisfied with their job? First, it would be wise to make a distinction between a job that is seen as part of a career and one that is not. Andrew is no longer challenged in his job and not satisfied with the pay. However, his particular position is an entry job from which movement is possible. It is this quality that keeps Andrew there. John, on the other hand, doesn't want to see any future in his present job; he hates it and is counting on other lines of work becoming available. For him, there are no career implications in his present work. Ada is in a similar situation. Her present job is strictly a holding action until she gets her career into operation. Janice and Greg both see their jobs as peripheral to their central career goals: one is looking for a teaching position, the other for enough herpetology work to sustain his operation and himself.

Unhappiness or dissatisfaction with employment is tempered by whether it is seen as part of a career or, simply, a source of income. Most serious is when "just a job" begins to look like part of a career, after all. This is Carl's situation. He is very frustrated by his working conditions and entertains many alternative possibilities, but must remain in his present job for quite some time. Part of this process, for him, is his active involvement in trying to change his working conditions. It is difficult for Carl to separate his work life from the rest of his life. However, this separation is an available option. John talks about this separation as if it were completely natural. He is trying to change his job, but, in the meantime, he lives a life that satisfies him. Diane, on the other hand, wants to change her whole life through her change of work. Ada does not admit even the possibility of a separation when she asserts that, for her, any work must be completely stimulating intellectually and fulfilling emotionally. Walter has a middle-of-theroad situation. His religion is kept separate from his peers at work and school, yet his life goals permeate all aspects of his life.

Andrew asserts that early in schooling, a person is faced with future employment based on a choice of reading and writing skills or manual skills. He believes the choice of hand skills leads to lower-income employment and lower status levels. He is trying to reverse the consequences of his original choice. John speaks about hating factory work and wanting office work. Carl does not disdain factory work, but desperately wants to work with people, rather than things. Penny has given up the idea of office work and wants to get into a factory. For a number of the women, this choice involved struggling with stereotypes of "woman's work." This is true for Ada and for Rose, who both faced strong pressures to conform to the "woman as mother and temporary worker" syndrome. Ada also had to fight ethnic-based ideas about the choice she should make. Janice's choice was never in doubt: she presumed that she would go into teaching.

How does one move from what is considered "just a job" into an acceptable career line? One strategy is to examine the job in terms of promotion or learning that would qualify one for another job elsewhere. Another strategy is to shift to the bottom of an enterprise such as Bell Canada, in which some movement into management is possible from below. Yet another strategy is to take courses concurrently with the job, using the job simply as an interim source of livelihood. Finally, there is the strategy of "it's who you know." This is a cynicism based on personal experience and what is heard from others. And if "it's who you know" is the strategy, all one can do is try all avenues until one "gets a break." The main thing is to keep people informed of one's availability and interest. However, as one individual said, "My family isn't too good at finding jobs." Thus, in this strategy much depends on the existing network around one. However, one can maximize this last strategy by being in the right places; for instance, a community college or university, where, as a by-product of the formal program, connections might be made which eventually result in a "break."

The most effective strategy, in the absence of one which is foolproof, is to maximize several. John is taking the advice of his boss and exploring a possible future with the company, if halfheartedly; he has applications out and is taking a course that might pay off in several years. Penny, whose family is badly situated to help with finding jobs, has applications out; from her perspective, taking courses is not realistic. She talks about getting a job through a brother who works in a factory. Walter, even though he is in a network at work which will be useful to him, is achieving a university degree to strengthen his hand outside the "who you know" syndrome. He is interested in the national and international job markets for which a degree is a necessity. Janice is making full use of the "proper channels" by constructing an attractive resumé and trying to arrange for interviews; but she is also counting on the principals she met during her practica in the Faculty of Education.

"I don't want three years to go to waste."

"I regret not having gone to university."

What happens to individuals who have completed post-secondary studies, but see no direct benefits in their jobs and careers? Three responses stand out. The first is to think of the degree or diploma as something irrelevant to any career path. (In the case of a diploma a specific career is usually incorporated in the rationale for the course.) The achievement itself is a goal, and there is a sense that it could be a mistake to make career connections. The comment that post-secondary education makes people loathe to start their careers at the bottom reflects the belief that education and career are discontinuous. It suggests that many with degrees see false connections to career and, therefore, make mistakes in their career planning.

A second strategy is to salvage specific components of the education which connect job and career; for example, the development of study habits, or the organization of research. Included would be the stance that the degree itself is an achievement, both personal and in terms of the larger world. Individuals say that employers want to see a degree in the personnel records, in order to consider promotion.

A third strategy is to reject post-secondary education as useless and, in fact, dangerous to job and career. Individuals are aware of friends and acquaintances who have done well with just high school diplomas or community college diplomas. Bitterness is a dimension of this strategy; there is a sense of having wasted time, of having been duped. The degree was supposed to provide an advantage, but hasn't; insofar as they emerge on the labor market later, degree holders have been left behind.

A particular individual may turn to each of these strategies, depending on the situation. John considers his university life unattractive, and most of the courses of dubious importance; yet he states that gaining the degree is an achievement which one cannot take away. What he means, in part, is that the degree is something no potential employer can explain away or disregard, especially in comparison with someone who does not have one. For Diane, even though community college was useful in fostering her interest in journalism and in helping her a get job, its main consequence was to raise her confidence.

What about those who have not gone on to post-secondary studies? First of all, there is the question of Grade 13. Penny thought that Grade 12 would give her everything she needed. In retrospect, she finds that some people who dropped out before Grade 12 are doing better than she, and she speculates that those who went on to community college or university are assured jobs. She feels that she made a mistake in thinking Grade 12 would assure her an economic future. Andrew has come to the same point and is taking night courses, but finds it difficult to correct what he now sees as his initial mistake. Rose, who also stopped after Grade 12 is vehement about the necessity of Grade 13 and the importance of taking a core curriculum. She wants to make up both.

Joyce presents a more ambivalent position. On one hand, she is very sure that stopping after Grade 12 was right for her; it allowed her to gain experience in the work world denied to those who pursued further education. (She states, in fact, that only those who do not go on look back on their education with fondness.) On the other hand, she continues to think of teaching history as an eventual career. Greg is also quite ambivalent. He wanted to go on after Grade 13, but did not raise his grade average to the level required by the programs he preferred. He found his community college program too undemanding, and dropped out (he mentions additional reasons for leaving as well). He is still not sure he did the right thing.

In Ontario today, most young people are aware that post-secondary education is available to anyone graduating from Grades 12 and 13. Not going ahead requires a decision. Individuals who do not go further, or who drop out, feel they must justify themselves. Greg mentions inadequate guidance in high school on the options open to him, and parents who exerted too strong a pressure in a rigidly fixed direction. Andrew wishes that his parents had pushed him harder, and that there had been better guidance counselors in high school. In John's case, it was a matter of going to university simply because he was eligible, with very little thought for the more specific decisions that would be involved. The image is of a guidance counselor who sends them on simply on the basis of grade averages. (In Greg's school only one university--the University of Toronto--was considered proper, no matter what the fit of individual students).

"I don't think about what I'd really like to do."

In what sense has the struggle to deal with the events and circumstances of their lives had destructive consequences? What is the background of Penny's hesitancy to think about the future? She takes a somewhat passive stance toward her life now, but it does not seem that this was always the case. Passivity, in her case, seems to be a way of dealing realistically with her present life. Diane has a certain tenacity about her life. She is intent on getting out and into a larger world; but she has waited longer than others, and seems quite fearful of what lies in store for her. She has been treated as someone who needs protection and help, rather than support and guidance. Greg speaks of the repeated pressure from his parents to conform to their wishes, and his helplessness in resisting these. His strategy was not to "rock the boat," but he paid a price. Rose has fought most of her life to be considered on her own merits; she has managed to survive and have hopes for the future. An important goal for her has been to be considered an equal to men in meeting the demands of schooling and work. Joyce has a good job and sees possibilities of promotion and continued challenges, yet reveals a bitterness toward those who went on to post-secondary studies. Andrew feels that he has gained some of the confidence and aggressiveness that he lacked earlier. Walter copes with life by observing from the sidelines before interjecting an opinion of his own. Wise as this strategy may often be, it reveals a questionable caution. He consistently rejects a place for emotion in human interaction. Janice has placed responsibility for her self-image on her father, as well as counting heavily on a future in teaching at a time when that profession is not expanding.

Much has happened in the lives of these people which has had destructive consequences; they are managing, but with a variety of handicaps. The source of the handicaps differ, and so do the ways in which our respondents have dealt with them.

"I want to work with people."

John says that his real vocation is working with people, but he does not seriously apply himself to this. In his case, working with people means helping people. He does not apply this view to his eventual occupation as an accountant. For Carl, too, working with people means helping people. He toys with volunteer work, and is very concerned about making his present work place friendlier and more humane.

A number of individuals suggest that people-oriented work is more challenging and less boring than other kinds of work. These are people who, at the moment, have relatively unskilled jobs in factories or offices.

"I want to make some money where ever I can."

It is a common tactic to accept temporary lines of work in the process of pursuing longer-term job and career objectives. Ada is working in a brokerage firm while preparing for a career in journalism. Diane will continue working at a small town newspaper until she feels ready to go to university.

Greg is supporting his immediate life and hoped-for vocation with unrelated jobs. Janice is doing the same. These jobs reflect a mixture of adaptation to reality and a certain flexibility. What happens when it is no longer clear that another more meaningful job will emerge? Penny has moved from hoping for office work to accepting factory work as desirable. The actual gap between hoped-for work and available jobs

421

differs in each case. John keeps questioning the high goals he set for himself. He seems to be in the process of readjusting his goals to fit the work available to him. Ada, on the other hand, has very high career goals, on which she is staking a great deal. Janice is poised with all her preparation behind her, looking for the first opening. Walter may be in the best position because he has achieved a full-time job in his intended field while still completing his academic preparation.

This process of moving from a set of possibilities to the realization that some choices are no longer open is a difficult one.

"In high school I had no idea what I wanted."

Looking back now, there is an awareness on the part of a number of the individuals that they were not prepared for some of the choices they had made in high school. It is almost as if high school came too early for them. They are now realizing that they should have taken more of the core subjects. There is ambivalence in the reasons given for making what are now seen as wrong decisions. Some blame peers; others, the course-choice system; still others blame insufficient adult guidance, whether by parents, teachers, or guidance counselors.

" You're the girl and if you choose not to get on, it's okay because you can get married and have babies and sit at home."

Women had to make some decisions not faced by men in quite the same way. A number of women felt that not much was expected of them and, in each case, had to make special efforts to develop. For Ada, there has been a constant struggle, informed, in part, by her contact with the women's movement. Rose has fought a similar battle in a much more isolated context. The consequences of being a woman have varied in each case, and so have the responses which developed.

CHAPTER NINE

CONCLUSIONS AND RECOMMENDATIONS

Concern with equality of educational opportunity is a particularly modern social value. Before the massive growth in Canadian education, earlier at the secondary level and then, in the mid-twentieth century, at the post-secondary level, an examination of equal opportunity was not thought to be relevant. In the nineteenth century, a minimal common school education for everyone was thought to be sufficient. However, with rapid industrial and post-industrial development, the need for a population with comprehensive general skills and specialized technical training led to an increased focus on "who was getting what sorts of education." Providing a free education up to a given level, with a common curriculum for all children, regardless of background, was one step in guaranteeing equality of opportunity.

As colleges and universities multiplied, the concept of equality of opportunity was given an additional dimension by the growth of public expectation that everyone with ability should have the opportunity to pursue post-secondary education. High school youth came to expect to become professionals in large number, as many studies of aspirations show. However, the desire to enter a few highly visible and prestigious occupations comes into conflict with labor market needs, where the requirements are not only for professionals, managers, and white-collar workers, but also for technical specialists and, more importantly, a multitude of blue-collar skills. Streaming at the secondary and post-secondary levels (and immigration) has largely functioned to meet the societal need for an occupationally diverse labor force.

The concept of equality of educational opportunity is complex, and is used in several different ways by educators, social scientists, and policy makers, undoubtedly causing considerable confusion in the minds of the public. A brief discussion of the factors related to the complexity of this concept may serve to increase our general awareness of the issues related to implementing changes; changes that, presumably, bring about increases in equality of opportunity or decreases in existing inequalities.

As we indicated in Chapters One and Six, social scientists have adopted varied stances with regard to equal opportunity. Insofar as the concept emphasizes the active involvement of students, or potential students, in taking advantage of opportunities (e.g., by developing their academic potential and merit), educational institutions are largely expected to play a passive role. For social scientists supporting the meritocratic interpretation of education, the contest among able, talented, young persons for scarce educational or occupational rewards is part of an ideology supporting individualism. Social scientists who adopt the critical approach, on the other hand, view young persons as entering the contest with varying social and cultural backgrounds that do not provide an equal chance of success in the contest. Furthermore, this inequality is implicitly (or even explicitly) recognized by disadvantaged youth, and many choose not to enter the contest at all. Finally, the critical social scientist might note that there would probably be much less concern about inequality of educational opportunity if equality of result characterized society. If economic, prestige, and power rewards were more evenly distributed in society, fewer invidious distinctions would be associated with different occupational and educational roles.

Equality of educational opportunity, then, cannot be viewed as a one-dimensional concept; in actuality, it consists of many dimensions. These dimensions are contradictory and impossible to fulfill at any one time. Add to this social change over time, and public debate over the concept seems assured forever.

We suggest that the meritocratic and critical approaches can serve to illuminate the issues relating to equality of educational opportunity, especially at key transition points. In this report, our analysis has dealt, specifically with the link between secondary and post-secondary levels of education on the one side, and the link between post-secondary education and work, on the other. In presenting our conclusions, we offer an operational definition of equality of educational opportunity that incorporates three distinct components: accessibility to higher education, equality of opportunity within post-secondary institutions, and the consequences of participation in higher education.

ACCESSIBILITY TO HIGHER EDUCATION

Proponents of the meritocratic and critical views are currently debating whether Canada, despite a great deal of effort and expenditure, has reached the goal of equal access to higher education. Those who support the meritocratic perspective persuasively argue that government and educators alike have motivated Canadians to take advantage of available post-secondary resources. Critics argue that ascriptive factors such as class, sex, religion, and ethnicity have not diminshed in importance, and present obstacles which lower aspirations and limit actual achievement.

While educational opportunity in Ontario has expanded in the last several decades in terms of facilities, and many young people have taken advantage of this expansion at the post-secondary level, our data indicate that the role of ascriptive factors in relation to educational and occupational attainment is still strong. While it may be too pessimistic to use a phrase such as "the die is cast," it is clear that, for large groups, social background factors strongly determine motivations and educational and occupational choices. We found that only 2 in 10 persons from the lowest socioeconomic groups ever enrolled in university, whereas 6 in 10 individuals from the highest socioeconomic group had university education--a very large difference in proportions. Whereas 74% of Toronto young people obtained post-secondary education, only 53% of small town and rural-area youth did so--a striking gap of 21%. Women sample members currently in the labor force are concentrated in clerical and sales and in health-related occupations; this is true of university graduates (42.4% in clerical and sales and 9.1% in health occupations) and CAAT graduates (41.5% in clerical and sales and 33.8% in health occupations)--concentrations much greater than for men, who are generally found in a greater diversity of occupations.

Since, in our highly technological society, success is highly dependent on educational achievement, from the critical perspective it is desirable that equality of condition characterizes access to education, higher education in particular. From this perspective, society wastes a great deal of talent if motivations to pursue higher education are not relatively equally distributed among all social groups. Given these assumptions, our data strongly demonstrate inequality of condition and the need to encourage and promote higher education for those with ability. Ways should be found to encourage young people of lower socioeconomic origins, youth from small towns and rural areas, and women to pursue post-secondary education leading to careers that fully utilize their abilities.

From a "systems" point of view, a great deal of responsibility for promoting equality of condition rests with the secondary and primary levels of education, since it is at these levels that tracking first begins, individuals first develop their academic and learning skills, and self-concept is formed, partly reflecting the evaluations of parents, peers, and teachers. The primary level of education is beyond the scope of this research, but many of our findings relate to the high school experience.

Accessibility and High School Education

The role of high schools is crucial in terms of access to post-secondary education. High school program selection is strongly related to one's socioeconomic status and regional background, with proportionately more respondents from higher socioeconomic origins and from urban centres selecting academic programs. Commercial and technical/vocational tracks are clearly sex-segregated; students receive lower grades on average in these tracks, compared with students in the academic program, and most students from these tracks go directly into the labor market, receiving little further education.

Our informal interviews with respondents indicated strong dissatisfaction with the high school experience. Many who did not pursue further education felt that courses were not relevant to their later work roles (also a finding in the survey), and were dissappointed that they had been given little or no vocational guidance. It is evident that a great many students require aid in choosing courses with a view to future applications; without some kind of pressure to take the courses that will provide access to post-secondary institutions, many students are left to the vagaries of peer influence, ignorance, lack of care within the wider support group (including the family), and whatever is most easy or fun. Furthermore, the relationship of student to teacher is very important in high school. Our interview evidence indicated that a good relationship (as perceived by the student) carried over into the subject matter, to the attitude towards self, and to further learning. Most interviewees could remember only a few good teachers. Under such circumstances, with little positive guidance in vocational planning and little peer and/or family support, demoralization is the likely outcome at a key stage in life, when performance in school is becoming fateful for future educational and occupational destinations.

In the Phase III survey report, The Critical Juncture (1975), it was pointed out that the roles of family and self-concept were key factors in determining the direction of educational choice. For example, high school students who later entered university were shown to have received stronger encouragement from their parents than did students who did not attend. Ideally, high schools ought to be mobilizing and working in concert with the family, peer group, and the student, in order to maximize individual potential in program choice and performance. The roles of parents and peers are plain to see with respect to gender socialization. Without the active encouragement of family, peers, and school personnel and without active early coaching and support for achievement in the male-dominated areas of the work world--affirmative action, so to speak--girls will be streamed by the passive structure of "opportunity" into conventional sex-stereotyped courses with sex-stereotyped and limited occupational futures.

In reviewing our findings regarding accessibility to higher education and the secondary schools, we would make the following recommendations:

* High school counseling facilities should be broadened and strengthened with respect to in-high-school counseling and post-secondary counseling.

* Parents should be brought into the guidance process at an early stage, with both parents and students being more fully informed about the consequences of decisions regarding courses, the options available, and the role of parental support in the learning process. Resources should be mobilized on behalf of students doing poorly in school.

* Closer coordination between various school programs and post-secondary institutions is needed to allow for more intelligent transition for students.

* Greater publicity should be given to various forms of financial aid and loans for those interested in taking advantage of post-secondary opportunities. The availability of such support should be made known to secondary students when they plan their high school courses. In this way, the *passive* opportunity offered by programs of financial aid can be converted into *active* opportunity--an aggressive delivery of opportunity, so to speak.

* Affirmative action should be taken to broaden the career interests of women. Special studies should be undertaken to learn how parents can be encouraged to support their daughters' selections of "male" subjects and "male" career interests. Research should be directed towards demonstrating how girls can be drawn into and experience success in "male" subjects. Guidance counselors should encourage girls to pursue occupational interests that are not stereotypically female.

* Special attention should be given to the needs of young people going directly into blue-collar work after Grade 12 who, at present, find high school dissatisfying and not closely related to the jobs they subsequently enter.

With respect to equality of educational opportunity, concern with the interface between secondary and post-secondary levels of education raises a multitude of research questions regarding the role of SES factors on either side of that interface. Our follow-up research has only part of the picture because we did not begin our study at the Grade 10 level and thus, do not have information on, and the views from, a substantial number of youth who did not complete Grade 12. The monitoring of students' socioeconomic profiles on either side of the interface would prove useful to policy makers if it were done in the context of focusing on important subgroups not benefiting from secondary or post-secondary education. The assumption here is that all social groups in Ontario (most of whom contribute to the financing of education) should benefit equally from the whole educational system, though the benefits may take many different forms.

Accessibility and Post-Secondary Education

Implicit in the recommendations we have made is the position that the secondary and primary systems of education can take more effective action to insure equality of educational opportunity than can post-secondary institutions. The three levels of education in Ontario constitute a system in which the out-put at one level is the in-put at the next. Individuals concerned with equality of opportunity at the post-secondary level should seriously consider the impact of tracking and the quality of education at the secondary level. Our follow-up research has made us especially aware of how program differences and choices by gender, which reinforce existing social inequalities, are passed up the educational system and amplified at the post-secondary level.

In Chapter Six, we noted that the role of socioeconomic status attenuates with respect to post-secondary matriculation and career beginnings, yet we have just argued that post-secondary education amplifies existing social inequalities. Is there a contradiction between these two claims? By attenuation of effect we mean to indicate that educational attainment is much more strongly related than socioeconomic background, or even region of origin, to first and current occupations. Once one continues successfully on to university, a high-prestige job is the likely consequence, irrespective of social background. Socioeconomic status and urban/rural origin, as factors determining occupational futures, operate most strongly at the secondary level of education; they determine whether one continues with education following high school and, if so, whether one goes to a university or a CAAT. Post-secondary education amplifies differences based on social background in the sense that there are many professional and semi-professional white-collar occupations requiring certification that can only be obtained through post-secondary institutions. It must be pointed out that, although socioeconomic status, regional origin, and gender sort people at the secondary level of education, and the effects of socioeconomic status and region attenuate with respect to the link between post-secondary education and the labour market, the effect of gender is enduring. It strongly affects the selection of post-secondary program and occupations entered after completing higher education.

The issue of the cost of post-secondary education should be addressed by anyone concerned with equality of educational opportunity. Our study has not dealt in depth with the question of financing in relation to students from low socioeconomic backgrounds. Our data indicate that low respondents from low socioeconomic backgrounds were more frequently dependent on OSAP/CSL than respondents from other socioeconomic levels. We also noted the special difficulties of youth in small towns and rural areas, who are more frequently from low socioeconomic backgrounds and must shoulder the added costs of moving to attend a CAAT or university. Further studies dealing with the implications of financing low-resource students are indicated.

While universities and colleges cannot do much to alter the streaming that takes place in secondary schools, there are directions that can be taken to encourage accessibility. These directions relate to increasing the awareness of individuals from low SES backgrounds of the financial aid and loan programs for financing post-secondary education, with such funding being expanded to meet demand from qualifying students. We have already indicated that awareness of financial supports should be increased in the high schools.

There are three other recommendations we would make:

* Universities should continue to adapt their programs to meet the needs of part-time students and adults who wish to study part-time; these adults being returnees and mature individuals wishing to obtain their first degree. Efforts should continue to bring university courses to potential students in small towns and remote areas.

* Systems should be developed to provide support for small-town and rural high school graduates to cushion the impact of the move to urban centres for post-secondary schooling, including special financial and social aids.

* The community colleges should be given adequate resources to meet the demands for their courses and programs, so that a trend will not develop which results in their selecting the better-prepared, higher-socioeconomic-status applicants and rejecting the less well-prepared but capable lower-socioeconomic-status applicants.

EQUALITY OF OPPORTUNITY WITHIN EDUCATIONAL INSTITUTIONS

Many would argue that, once disadvantaged young persons (e.g., lower-socioeconomic-status persons, women) gain entry to post-secondary institutions, their experiences within higher education will be equal; at least, this is the implicit assumption. In this section, we question this assumption in several ways.

In Ontario (as well as other provinces) secondary school students may select one of two major types of post-secondary education; that is, either university or community college. Community colleges were set up to provide post-secondary education to students not in a senior matriculation or academic stream. Although CAATs could have been fashioned after the California system of junior colleges, the deliberate decision was made to make these terminal diploma programs and not "back door" entries into universities. This strongly suggests a hierarchy among post-secondary institutions in Ontario, and implies that secondary students are tracked from high school into either CAATs or universities.

It is clear from this study that universities and colleges are quite distinct in terms of the kinds of people they attract. Students coming into universities are more advantaged in social background, have relatively greater academic (high school) accomplishments, are more likely to be male, and have stronger self-images than students entering colleges. CAATs draw disproportionately from students enrolled in commercial, vocational, and technical secondary school programs. These students tend, as well, to be of lower socioeconomic backgrounds than university students. CAAT students, although they may attach greater value than university students to their courses (and the courses' relevance to the job market), are also more likely to withdraw and not return.

While we have stressed the differences between high schools, colleges, and universities, there is still another aspect of these institutions that is closely related to equality of opportunity; that is, the internal structure of the institutions. Our exploration of secondary and post-secondary institutions indicates that both have "lives" of their own, manifested in visible systems of internal stratification based primarily on program differences. These internal structures also relate to the development of student subcultures and variations in levels of participation in extracurricular activities. The internal program differences in high schools have already been noted as the main factor in determining future post-secondary education. We have not yet stressed the implications of similar phenomena in post-secondary institutions.

Across the province, there are undoubtedly many internal differences for each type of post-secondary institution. The major difference that emerges from this study is the gender difference in major or program selection. At universities, men took a greater diversity of majors than women, with concentrations in: social science (20.7%); physical sciences and mathematics; agricultural and biological sciences; applied sciences; and business, economics, and commerce. The last four categories accounted for 54.3% of all male enrollees. University women concentrated in: social science (30.5%); education; physical education; law and social work; agricultural and biological sciences; and in arts, fine arts, humanities, and performing arts. The last three categories accounted for 40.9% of all female enrollees. At the community colleges, men concentrated in electronics and electrical technologies (14.2%); business management and commerce (20.5%); and engineering and related technologies (21.0%). Women CAAT students were found mainly in community services, teaching, and social welfare (13.6%); secretarial arts and science (18.9%); and nursing (22.6%).

There is a dilemma for universities and colleges with respect to these sex-stereotyped selections of majors. On one hand, they reinforce existing gender differences in later occupational choices; on the other hand, they represent a realistic assessment of the gender segmentation of the labor market and thus, of actual job opportunities. The dilemma is that the universities in particular, and colleges to some degree, are not organized to advise, encourage, or persuade men and women to take majors in nonconventional areas; nor can they alter the structure of the labor market. It would seem desirable, however, for these institutions to consider implementing a system of continual advice, and to link this advice with exploration of particular career options while students are still taking courses. (This might be done, for example, in courses that explore the occupational world from the perspectives of several disciplines.) Even university students frequently change their majors and are undecided about their occupational futures. Thus, guidance regarding majors would be of great potential use to such persons.

There appears to be a growing number of young people who "straddle the post-secondary fence," enrolling in universities and CAATs (8.6% of our sample). As a group, these persons tend to be of higher socioeconomic status, of urban origins, and to include more women than men. They did not find high school generally useful, or of use with respect to jobs. They have not done as well as university and CAAT graduates in terms of first or current jobs, or in terms of salary; majorities indicated that their first and current jobs are not related to their education. On the basis of this information, it appears that many of these individuals are not successful in either university or community college, but since about one-third of this group is still in school, it is too early to judge their academic and occupational success in total.

The presence of this group raises interesting questions for future study. How do university students cope with CAATs, once they enroll? The same question can be raised with respect to CAAT students who enter universities. If the boundary between CAATs and universities continues to weaken as greater numbers seek both kinds of educational experiences, what are the implications for the future working relationships between universities and community colleges? Does the overlap of students have consequences for teaching and learning in the classroom situation? Should transfers between these two kinds of institutions be made easier and encouraged? Should and can there be more joint programs between CAATs and universities?

On the basis of the above discussion, we would make the following recommendations with respect to equality of opportunity within the post-secondary institutions:

* Facilities should be created within universities which encourage a more realistic job selection process, including a dynamic orientation to career development which allows more positive attitudes towards starting low and moving up. Academic programs should be integrated with career development programs.

* More help should be given in CAATs and universities to low-socioeconomic-origin students, in order to reduce the number of those who drop out.

- There should be a reevaluation of the separation of CAATs and universities, with a view toward establishing better working relations between these kinds of institutions, facilitating the transfer of students, and creating joint programs where feasible.

- Research should be done examining the high school as a social system, with the aim being to encourage social change away from authoritarian teacher-student relationships and encouraging more cooperative, supportive relationships; change which would also require smaller classes and greater support for teachers.

- Research should be undertaken to explore the interaction between family, subculture, peer group, and high schools, so that a fuller understanding is obtained of value transmission, encouragement to do well in school and to continue education, and the development of positive self-conceptions.

THE CONSEQUENCES OF PARTICIPATION IN HIGHER EDUCATION

In the meritocratic perspective on education, it is sufficient for society to provide opportunity for advancement through higher education for those who have ability and motivation. We have seen that, although opportunity exists, subcultural and other barriers exist which result in some groups taking greater advantage of higher education; in particular, individuals in higher socioeconomic groups and from urban areas. Women lose out, not so much by not taking advantage of higher education, but by limiting themselves to a few majors or programs leading to certain overcrowded women's occupations, and by being victims of discrimination in the labor market.

This latter consequence points up a main concern of those with a critical perspective. The inequality of result that occurs as individuals move from education to work is not so much a function of the stratification of educational opportunity as it is the function of inequality in the labor market; that is, in the economy itself. Education is a factor in the structure of differential rewards for work. Employers use educational certification as a basis for deciding who should do what kind of work and how that kind of work should be rewarded. Also, there is an ideology that holds that persons with more education deserve greater rewards than those with less education.

Inequality of result of education is amply demonstrated in our findings. In Chapter Six, we demonstrated marked current occupational differences by levels of educational achievement by gender. We found a clear hierarchy of job prestige associated with different levels of education, though for women the hierarchy was not strong between CAAT graduates, those with some university and/or CAAT experience, and those with no post-secondary experience. With respect to salary differences, we found some evidence to indicate a potential future hierarchy of incomes based on levels of education. For example, men with no post-secondary education and with five to six years of labor-market experience were currently earning on average only from $1,000 to $1,500 more per year than recent university graduates; indicating that university degree men have substantial starting incomes and will probably experience increases that will bring them, shortly, above income levels of men with no post-secondary education. Women university graduates earned 21% less than men graduates (1978-79), and women with no post-secondary education earned 41% less than men with only high school education (these being persons who started current jobs in 1978-79).

Since the early 1970s, there has been an awareness that universities were graduating many more highly-trained individuals than the economy could employ in ways fully utilizing their skills. The problem has become known as underemployment. As Chapter Six demonstrates, in terms of current jobs, and utilizing average GED levels of the current occupations of our respondents (GED being a measure of the objective educational requirements of jobs), we found that 42.0% of university degree men, and 56.1% of university degree women were underemployed. On the basis of direct questions to respondents asking whether they believed their job matched their education, 53.6% of university graduate men believed their education did not match their current job, with the proportion for women university graduates being 58.0%. For men CAAT graduates, 49.7% believed that their job did not match their education, whereas for CAAT graduate women the proportion is only 31.0%.

From the critical perspective, the phenomenon of underemployment of those with higher education demonstrates a waste of talent of many, many individuals; a loss of talent that is not made easier to accept by saying that the other side of the underemployment "coin" is a general rise in the levels of education of the population. With the advent of the underemployment of university graduates, some have blamed universities for producing too many graduates, or have blamed young people themselves for wanting to go to universities to obtain degrees of doubtful value; these views being, in our opinion, tantamount to "blaming the victim." Interestingly enough, our CAAT and university graduates (who must be very aware of the difficulties of linking their training to jobs utilizing their skills) generally evaluated their post-secondary educations positively in terms of general usefulness and job-related usefulness. CAAT graduate men were somewhat more critical of the general usefulness of their education, and university degree women were somewhat more critical of the job-related usefulness of their education.

We take the position that criticism of post-secondary institutions and students for underemployment is largely misplaced; rather, the source of the problem lies with government and the structure of the economy. In the 1960s, government expanded post-secondary education with two goals in mind: to produce an abundance of highly-trained individuals for what it considered the needs of the high-technology industries and businesses of the future; and to provide the personnel for the expanding public-sector needs in the fields of primary and secondary education, social welfare, and health. The problem of underemployment arose, on one hand, because the economy of the 1970s did not have a sufficient research-and-development component to absorb the highly trained;[1] and, on the other hand, because of the rather abrupt curtailment of growth of educational, social, and health services. Curtailment in these areas have heavily damaged the career opportunities of women in the last few years.

In the current situation of oversupply of the highly trained, employers may be tempted to attract college- and university-trained personnel by imposing further educational requirements on job applicants. In effect, such certification requirements would make a degree or diploma all that more valuable as a requirement for employment prospects, though the work being done by such highly-trained individuals would likely not fully utilize their training. This would be a new kind of discrimination--educational discrimination--that would make it much more difficult for persons with only a high school education to find well-paying and responsible jobs. In our view, unreasonable certification requirements are not desirable because they would unfairly penalize a significant segment of the youth population.

Much has been said in the last years about the extent to which education allows students to continue learning throughout their lives. It is generally assumed that we live in a "learning society," in which individuals and groups are called upon to demonstrate adaptability long after formal education has been completed and the first career moves end. With respect to our study population, we found that many of those who have not yet undertaken any schooling after Grade 12 anticipate doing so at a later time. We also found that many are taking part-time courses while fully employed. These are some indications that the young do not have a monopoly on schooling, and that the world of work is not as isolated from education as is often assumed. (Day students not only often work part-time, but generally work full-time when not going to school.) Such findings also suggest that high schools, CAATs, and universities, in addition to fulfilling more immediate needs and aspirations of students, have a role to play in laying a foundation for life-long learning. With this in mind, it is interesting that many of our university graduates valued their courses independently, regardless of job usefulness. This would suggest that these students are aware of educational values in post-secondary education above and beyond application to jobs.

However, it is pertinent to raise the question of the part played by liberal arts in CAATs and universities. The liberal arts have their foundation in basic skills such as reading, writing, and computation; it is in the liberal arts that these skills are developed and related to our cultural, social, and physical worlds. Are the CAATs doing enough to cultivate the liberal arts and thereby, in part, making it possible for their graduates to continue learning in the future? In the universities, are students who are not as well prepared as some on entrance receiving the additional help and concern that will enable them to take full advantage of the liberal arts curriculum?

Insofar as we found a significant segment of students enrolling in some combination of college and university programs, it appears that a strong liberal arts background would facilitate and foster the collaboration of these two types of institutions, while recognizing their unique missions.

Finally, it is interesting to refer to the complaints of a number of our interviewees concerning the separation of classroom learning from "real" or practical life. In the view of these individuals, their learning was thwarted by the barriers between school and the world of work. As a result, some of them abandoned schooling prematurely, or were bitter about the schooling they did undertake. It would seem that schooling has the strongest impact when it is clearly anchored in the everyday life and experience of a student. Many students emerge from high school not knowing the importance of basic intellectual and physical skills and are, in fact, "turned off" by schooling. This would suggest innovation in relating curriculum to the work-and-life worlds of students throughout the educational process. At every stage, students should be exposed to the world outside the classroom, ironically in part, to enhance the value and uniqueness of what the classroom offers. The goals of this kind of commitment would be to enable CAAT graduates to continue being occupationally and socially mobile after graduation, and to make sure that university graduates understand that success in the work world requires effort and experience above and beyond what can be learned in the classroom.

On the basis of the previous discussion, we make the following recommendations, with the recognition that several of these recommendations go beyond what might be done by the educational system alone.

* Given the importance of general education for developing a citizenry that can deal effectively with social and technological change, liberal arts should continue to be the core of higher education at universities, but should also be strengthened at community colleges. This liberal arts foundation should be made relevant to the lives and experiences of students at universities and colleges, so that learning is self-motivating.

* There should be a greater mixing of the theoretical and practical aspects of living at every level in the educational system combining, in a creative way, classroom and "real world" experience.

* It should be the burden of employers to demonstrate that certificates and/or other forms of tests are genuinely required for specific jobs, so that certificates and tests will not be used as tools for unfair discrimination against individuals with no post-secondary education.

* Government should pursue an industrial strategy which increases secondary manufacturing, and research and development, so as to provide job opportunities implicitly promised to persons who have been encouraged to pursue higher education. A rounded and healthy industrial economy would also provide the basis for strong public service sectors providing employment in the areas of education, social welfare, and health for graduates of post-secondary institutions.

* Special efforts must be made to expand the employment opportunities of women, thereby transforming the occupational structure so as to drastically reduce job segregation based on sex. This should be done to increase the number of women in male-dominated occupations, and then to increase the number of men in female-dominated occupations.

* Equality of result should be encouraged by social policies that reward socially useful work at a level that permits a

413

family life for all persons, regardless of gender, socioeconomic origin, or level of educational attainment. Such programs would, of necessity, aim to equalize labor-market power between occupational groups and improve the quality of work life.

GENERAL CONCLUSIONS

> I have never doubted that equality of access to all educational institutions was and should continue to be an important objective of social reform. As the western capitalist economies had been stumbling through their crises of the late 1970s and there appeared to be surpluses of educated manpower, the role of education in economic growth came seriously into question. Similarly, its contribution to expanding equality was critically assessed. Equality of educational opportunity alone was not enough to bring about some measure of redistribution of wealth through economic opportunity and the increased productivity of workers. I am not sure that I ever thought it was sufficient, but I was certainly seen by my critics as representing something of a tired liberal school who thought that all that was necessary was to open up the schools and universities, through which young people would proceed to an Eldorado that lay beyond.
>
> ...John Porter (1979)[2]

These comments by the late John Porter reflect a general ambivalence among social scientists who have viewed public education as a primary strategy for achieving equality of opportunity among the general Canadian population. In the late 1960s, Porter and other social scientists tenaciously clung to the hope that increases in equality of educational opportunity, mainly through increased accessibility to post-secondary education, would also improve the equality of condition for disadvantaged persons (i.e., whatever is valued as good in the society, be it material resources, health, personal development, leisure). Much subsequent research introduced a cynical note: the meritocracy or liberal approach to education--the millions of dollars spent on creating excellent institutions of higher learning--did not appear to overcome initial, socioeconomic differences among Canadians.

The social conditions of milieu within which our young are reared strongly predict their eventual acquisition of formal levels of education.

All the evidence is not yet in and, as we indicated in our discussion of the concept of equality of educational opportunity, the premises for evaluating evidence shift with changes in our society. Be that as it may, the results of our panel survey of former Grade 12 students provide convincing evidence that higher-socioeconomic-status persons, males, and urban dwellers are "more equal" than others in gaining entry to university, completing their studies, and attaining relatively good jobs with moderately high incomes.

The panel aspect of our survey allowed us to gain a limited view of a respondent's life cycle. This provided us with several important insights. First, the effects of socioeconomic status are, indeed, all-important in terms of who gains access to post-secondary education; however, once young people enter, the role of socioeconomic status attenuates. Generally speaking, once a young person gets into university or college, factors other than socioeconomic status become relatively more salient in determining the nature of experiences within higher education and eventual job outcomes (e.g. prestige, salary).

A second important insight gained from inspecting our findings is that the women's movement has a long way to go before proclaiming a major victory. Whether we consider accessibility, equality of opportunity within post-secondary institutions, or the consequences of acquiring a higher education, women fare more poorly than men. Proportionately more women (in spite of generally superior academic performances) are tracked into vocation-oriented CAATs, where they train primarily in nursing, secretarial arts and sciences, community services, teaching and social welfare, and medical technologies. The situation of women in universities is no different; sex-stereotyping occurs, with women found mainly in household sciences; nursing; fine, applied, and performing arts; physchology; sociology; etc. Insofar as these program areas are hardest hit in times of economic recession, women are most likely to suffer the brunt of unemployment crises.

After leaving their post-secondary institutions with degrees, diplomas or certificates in hand, women find that the world of work provides no better opportunities for competing fairly with men. Their concentration in female-dominated occupations (e.g. primary school teaching, clerical jobs) serves to increase their disadvantage with respect to salaries and promotion opportunities.

Our analysis suggests that a concern with equality of opportunity (and its relationship to equality of condition) he expanded to include gender. The marked differences among men and women displayed in this study reflect basic differences in the society-at-large and in our schools. Since schools are provided with a mandate to inculcate core social values, a more complete understanding of how they transmit (or perpetuate) these values to girls and boys calls for in-depth analysis, if changes to this process are to be made.

Before completing our discussion of equality in educational opportunity, we must consider the role played by geographical region. The overall rate of post-secondary experience was found to vary by as much as 21% (highest in Toronto and lowest in small towns and rural areas). Insofar as a majority of young persons must expect to leave home to enroll in post-secondary institutions, and insofar as rural areas are disproportionately populated by lower socioeconomic families, rural people suffer a double hardship in terms of gaining access to and financing their post-secondary education. In terms of occupational consequences, our analysis suggests greater job opportunities exist for city people than for rural people, and that the former group hold down relatively more prestigious jobs. Birthplace in Ontario, then, influences equality of opportunity in terms of proximity to post-secondary institutions, interaction with socioeconomic status, and variations in occupational structures within the province.

The Value of a University Education

People hold different beliefs concerning the goals and objectives of higher education. Some people feel that university is a training site in which students should acquire general knowledge, the ability to think clearly and question analytically, and the capacity to establish life goals. In recent years, however, a growing number of Canadians have begun to question the utility of a university education. They claim that higher education is wasted for the individual if it does not lead to increased earning power or job satisfaction. From the point of view of society, higher education is wasted if it does not lead to increased productivity or is not used on the job.

Although it is true that many Canadians (and, quite frequently, the media) accuse universities of not adapting to change and not making courses and programs sufficiently "relevant," university enrollees in our study were more likely than high school graduates or CAAT graduates to indicate that their education was generally useful. University enrollees claimed that their education helped them in developing an appreciation for ideas, increased their thinking abilities and leadership potential, and also helped to decide on a career. Moreover, only slightly more university than college graduates felt their education was rarely useful in locating or identifying appropriate jobs. This finding ostensibly contradicts our objective analysis of underemployment, which revealed that well over 50% of university graduates selecting first jobs were underemployed with respect to the amount of formal education required. However, we must remember that, with a growth in post-secondary education, the number of university-educated workers expands, and they begin to move downwards into jobs and income ranges previously occupied by those with only a high school education. This latter group, then, is forced even lower, in terms of income, and they most often take jobs formerly held by the best elementary-school-level workers.[3] Underemployment may presently be used as an inappropriate attack on university education in a society where educational credentials seem to count more and more. To advise young people to avoid a university education may actually result in lower incomes and poorer, less challenging work. Finally, in our increasingly knowledge-based society, the general educational (liberal arts) component of education, be it in high schools, community colleges, or universities, becomes of utmost importance in allowing people to deal adequately with rapidly changing job requirements and increasing demands for involvement in the life of the community.

Future Research

In concluding our report on the fourth phase of our panel survey, some mention should be made of the need for continuing research of this kind. Equality of educational opportunity is, as we have already indicated, a complex issue. The meaning of the concept changes with changing societal conditions and alterations in the relationships between important institutions, such as education and the economy. Given that we simply explored the educational and labor force involvement of one cohort of young people, our assessment of whether "the die is cast" must be of a limited nature. Only with a repetition of the kind of research design employed in this study could this evaluation be expanded and given historical depth, enabling an assessment of government policies in increasing educational opportunities.

The replication of our study in the near future would permit researchers and government officials to evaluate the changing status of women, the levels of opportunity of young people living in rural areas, and the role of socioeconomic status at key transition stages in the life cycles of Ontarians. Questions about women's aspirations and labor-force experiences could more easily be answered. Moreover, one could more fully evaluate the role of socioeconomic status in gaining access to post-secondary institutions, and determine whether the financial needs of potential post-secondary students are changing. The obvious importance of these questions requires the continued support of social research by government, from agencies that deal with education and with labor. We hope that the greater utility of the panel or follow-up study, compared to the one-time cross-sectional survey, has been demonstrated and that, as a result, over-time studies will become more common. Finally, multiple research strategies are desirable, since different kinds of questions require different kinds of research strategies. We have found it very useful to combine the quantitative and the qualitative kinds of research, each informing the knowledge derived from the other.

FOOTNOTES

1. A. Lockhart. "Future Failure: The Unanticipated Consequences of Educational Planning," Robert M. Pike and Ela Zureik, eds. Socialization and Values in Canadian Society, Vol. II. Toronto: McClelland and Stewart, 1975, pp. 182-208. Alexander Lockhart speaks of an implicit "social contract" between government and youth beginning in the 1960s, which encompassed on one hand, the provision of post-secondary educational opportunity for all, and the promise of upward mobility into scientific, technical, and administrative jobs, on the other hand, the contract justified in terms of the "human capital" economic theory.

2. John Porter. The Measure of Canadian Society: Education, Equality and Opportunity. Toronto: Gage Publishing Limited, 1979, pp. 241, 242.

3. Ibid., p. 251.

APPENDIX A

SURVEY OF ONTARIO GRADE 12 STUDENTS*

PHASE IV

(THIRD FOLLOW-UP)

INTRODUCTION

This survey was the third follow-up of a representative sample of 1972-73 Grade 12 students in Ontario who were originally surveyed to determine their academic attitudes and aspirations. The original design was based on a stratified, clustered sampling technique which would minimize costs and maximize the precision required from the sample estimate. The total Grade 12 population was divided into clusters (Primary Sampling Units or PSUs), defined as Grade 12 classes whose average size was set at 32 students. The 1971-72 Public Secondary School and Private Secondary School Enrollment Report was used as an approximation of the 1972-73 Grade 12 population and provided the basic sampling frame for sample selection. The number of class units allocated to a school was defined by

$$U_i = \frac{\text{the total Grade 12 population of the school}}{32}$$

which equalled 3,400 PSUs.

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Survey Research Centre
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October 1979

The stratification was based on general criteria which suggested that students' academic aspirations and intentions are somehow related to the size and degree of urbanization of the school boards. This resulted in the creation of four strata: the first included Metro Toronto only; the second included other large metropolitan areas; the third included smaller cities, towns and urban fringe areas; and the fourth included the mainly rural school boards. The sample design lends itself to the post-stratification of survey data.

The 1972-73 sampling frame consisted of a total population of 108,600 or 3,400 PSUs. Each school was allocated a number of PSUs such that the probability of selection of a school was proportional to its size. Two independent samples of PSUs were selected to represent (in total) 3.2% of the frame population (predetermined optimal sample size). The selected PSUs determined the number of selected schools (99). The subsampling ratio within a school was defined by the ratio of the number of selected PSUs to the total number of PSUs allocated to the school.

Correction factors that take into account the survey nonrespondents were calculated in the process of weighting the data. The Phase I nonrespondents included those students who were absent on the day of administration or refused to participate. Weights were then assigned for each PSU. Nonresponse in Phases II and III was treated in the same manner as in Phase I* and PSU weights adjusted accordingly. A second set of correction factors was computed for the sample subset that responded to Phases I and III, but not to Phase II.

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* For a full description of the sample design used in Phase I and the methodology for Phases II and III, see Paul Anisef The Critical Juncture: Realization of the Educational Career Intentions of Grade 12 Students in Ontario, September 1975, Appendix 1.

In the first phase of this study (spring 1973), data were collected, in the form of self-administration questionnaires, from 2,555 Grade 12 students. The self-administration was conducted in groups of selected students at the selected schools. Two follow-up telephone surveys were conducted in November 1973 and November 1974 to monitor the relationship between the respondents' career aspirations and their actual achievements.

PHASE IV - THIRD FOLLOW-UP SURVEY

A third follow-up study of the respondents in the original survey (Phase I) was carried out in the summer of 1979 (May-July). As with the other follow-up surveys, the purpose of the fourth phase was to monitor the relationship between the respondents' career aspirations and their actual achievements as indicated in Phases I, II and III. The third follow-up survey, referred to as Phase IV, may be divided into a number of stages, each making use of telephone interviewing and mail questionnaires. Because almost five years had past since the last attempt to contact Phase I respondents, it was necessary, initially, to obtain correct addresses for the 2,555 original students. The tracing and updating of student addresses will be referred to as Stage 1. Once the correct addresses were obtained (for 2,004 of the 2,555 Phase I respondents), Stage 2 was implemented and involved the actual collection of the data by means of mailed questionnaires and telephone interviews. The combined procedures resulted in 1,522 completions. Using the number of Phase I completions as the base, this represents a 60% completion rate. However, if we only consider those students for whom we had a 1979 address, the completion rate increases to 76%.

As with the second follow-up, it was decided to attempt contacting all Phase I respondents and not just those responding to Phase I, II, and III. In order to do so, it was necessary to confirm or update the addresses of the original Phase I students and/or their parents. Most of the original tracing was undertaken by the principal investigators, using current telephone directories and city directories. Approximately 75% of the original parental addresses were updated and reconfirmed. During July 1978, 1,910 questionnaires were mailed to the respondents' parents at the updated addresses requesting the current addresses and telephone numbers of their sons/daughters, and information on their past education, occupational position, and marital status. This first mail-out resulted in 913 returns. Four weeks after the initial mail-out, a follow-up questionnaire was sent to all the nonrespondents. Of the 1,370 mailed, 277 completed questionnaires were returned.

During August 1978, the Survey Research Centre took over the task of tracing parents'/students' addresses, using the following procedures:

1. All current telephone directories were checked for current addresses and telephone numbers.
2. In centres were city directories were available, the names and telephone numbers of the occupants of the Phase I addresses were recorded. In addition, the names and telephone numbers of their neighbours were also recorded.
3. In rural areas, all residents with the same surname as the respondents were checked and recorded.
4. In cases where no information was obtained using the above procedures, telephone operators were contacted for assistance.

Clerical and tracing procedures were carried out from August 3 to August 17, 1978. Approximately five to six interviewers and two supervisors were trained, and conducted the telephoning from the offices of the Ministry of Colleges and Universities during the week of August 16, 1978. This stage of the tracing operation resulted in 356 updated addresses of the 692 names supplied. Only one respondent refused to cooperate.

During the first week in September 1978, attempts were made to contact all the parents/students who had not responded to the two mail-out questionnaires. Ten interviewers operated from the Ministry, using their WATTS lines and, occasionally, long-distance lines. In addition, two interviewers operated from their homes. A total of 458 updated addresses resulted from this stage.

As a result of the tracing procedures, 1,190 updated addresses were obtained using the mail questionnaires and 814 updated addresses were obtained by telephone (46% and 32% of the sample, respectively). Overall 2,004 (78%) updated addresses were obtained (see Tables 1 and 2 for the results by stratum and region).

The second stage of Phase IV involved the actual collection of data using mail questionnaires and telephone interviews. The initial mail-out was made during the week of April 24, 1979 to all Phase I completions for whom we had updated addresses (2,004). Reminder cards were sent to those not responding by May 18, 1979. In total 1,068 completed questionnaires were received by July 27, 1979 (Figure A.1).

During the two-week period starting July 11, sixteen interviewers and two supervisors, trained by the Centre, conducted telephone interviews with the nonrespondents to the mail questionnaire from the offices of the Ministry of Colleges and Universities. Up to five attempts were made to obtain an interview. This stage resulted in 454 completions (Figure A.2).

From the original group of 2,555 Phase I respondents, 1,522 responded to Phase IV representing a completion rate of 59.6%. However, considering only those Phase I respondents for whom current addresses were available (2,004), the completion rate increases to 76.0%. A more detailed breakdown of the respondents and nonrespondents is included in Table A.4, the final field report*.

As in Phases I, II, and III, the effect of nonresponding students in Phase IV was corrected at the level of the original sampling unit. However, in Phase IV, four sets of nonresponse corrected weights were necessary for the PSUs. The first set of correction factors (A) was computed for the subset of the sample that responded in Phases I and IV (N = 64). The second set of correction factors (B) was computed for the subset of the sample that responded in Phases I, II, and IV (N = 59). A third set of correction factors (C) was calculated for the subset of the sample that responded in Phases I, III, and IV (N = 92). Finally, the fourth set of correction factors (D) was computed for the subset of the sample that responded in Phases I, II and III, and IV (N = 1307). The need for the four sets of corrected weighted resulted from the fact that not all the students responded to all four phases.

As in the case of the nonresponse correction factors for Phase I (T), Phase II (U) and Phase III (V and Z), the factor A was aggregated over the i^{th} PSU and the j^{th} sample in the following manner:

Table A.4, the final field report, was compiled by Mary Chiu, Technical Supervisor, Sampling Department of the Survey Research Centre, York University.

$$A_{ij} = \frac{n_{ij}}{p_{ij}}$$

where p_{ij} = the number of Phase IV respondents in PSU i and the sample j.

The Phase IV corrected weights for the i^th PSU in samples 1 and 2 that incorporate the correction factor A were, respectively:

$$W'_{i1}\ (IV) = 62 \cdot R_1 \cdot S_1 \cdot T_{i1} \cdot A_{i1} \text{ and}$$
$$W'_{i2}\ (IV) = 62 \cdot R_2 \cdot S_2 \cdot T_{i2} \cdot A_{i2}$$

The creation of a matched sample between Phases I and IV, and sample estimates based on total number of respondents in Phase IV would require the above form for the corrected weight.

The factor B was aggregated over the i^th PSU and j^th sample in the following manner:

$$B_{ij} = \frac{m_{ij}}{q_{ij}}$$

where q_{ij} = the number of Phase IV respondents in PSU i and sample j that were also respondents in Phase II.

The Phase IV corrected weights for the i^th PSU in samples 1 and 2 that incorporate the correction factor B_{ij} were, respectively:

$$W^2_{i1}\ (IV) = 62 \cdot R_1 \cdot S_1 \cdot T_{i1} \cdot \mu_{i1} \cdot B_{i1} \text{ and}$$

$$W^2_{i2}\ (IV) = 62 \cdot R_2 \cdot S_2 \cdot T_{i2} \cdot \mu_{i2} \cdot B_{i2}$$

Sample estimates based on a matched sample between Phases I, II, and IV would require the above form for the corrected weight.

The factor C was aggregated over the i^{th} PSU and j^{th} sample in the following manner:

$$C_{ij} = \frac{O_{ij}}{W_{ij}}$$

where W_{ij} = the number of Phase IV respondents in PSU i and sample j that were also respondents in Phase III.

The Phase IV corrected weights for the i^{th} PSU in samples 1 and 2 that incorporate the correction factor C_{ij} were, respectively:

$$W^{3}_{i1}\ (IV) = 62 \ . \ R_1 \ . \ S_1 \ . \ T_{i1} \ . \ Z_{i1} \ . \ C_{i1} \text{ and}$$

$$W^{3}_{i2}\ (IV) = 62 \ . \ R_2 \ . \ S_2 \ . \ T_{i2} \ . \ Z_{i2} \ . \ C_{i2}$$

Sample estimates based on a matched sample between Phases I, III, and IV would require the above form for the corrected weight.

The factor D was aggregated over the i^{th} PSU and j^{th} sample in the following manner:

$$D_{ij} = \frac{P_{ij}}{y_{ij}}$$

where y_{ij} = the number of Phase IV respondents in PSU i and sample j that were also respondents in Phases II and III.

The Phase IV corrected weights for the i^{th} PSU in samples 1 and 2 that incorporate the correction factor D_{ij} were, respectively:

$$W^4_{i1}\ (IV) = 62\ .\ R_1\ .\ S_1\ .\ T_{i1}\ .\ \mu_{i1}\ .\ V_{i1}\ .\ D_i 1 \text{ and}$$

$$W^4_{i2}\ (IV) = 62\ .\ R_2\ .\ S_2\ .\ T_{i2}\ .\ \mu_{i2}\ .\ V_{i2}\ .\ D_{i2}$$

Sample estimates based on a matched sample between Phases I, II, III, and IV would require the above form for the corrected weights.

The Phase IV corrected weights, listed by sample and school, are included in Table A.3.

TABLE A.1 STAGE 1: RESULTS OF TRACING PROCEDURES BY REGION

Region[a] Number	No. of Schools	No. of Selected Students	Mail-Out Completions 1st	Mail-Out Completions 2nd	Mail-Out Attrition	Tracing by Phone Completions	Tracing by Phone Attrition No Information	Tracing by Phone Attrition Other	Contacts of Nonrespondents By Phone Completions	Contacts of Nonrespondents By Phone Attrition No Information	Contacts of Nonrespondents By Phone Attrition Other
2	10	208	69	23	1	25	33		48	8	1
3	6	152	56	10	1	25	16		28	14	1
4	10	261	89	33		50	23		46	15	4
5	8	199	73	17	1	36	21		37	13	
6	16	365	128	34 1*	2	69 4*	53	1	54	16	3
7	20	542	191	67	1	37 3*	75		97 9*	61	1
8	14	331	129	40	2	25	54	1	15 26*	36	3
9	7	166	66	15		27	21	1	23	12	1
10	13	331	111 1*	37		54	37		69 4*	15	3
TOTAL	104	2555	912 1*	276 2*	8[c]	348 8*	333	3[d]	417 41*	190	17[e]
			913	277	8[c]	356	333	3[d]	458	190	17[e]

* - Represents questionnaires received after the cut-off date or completions with mailing addresses only.

[a] - Educational regions of Ontario:

01.	Region deleted	06.	Niagara
02.	Mid-Northern Ontario	07.	West Central Ontario
03.	North Eastern Ontario	08.	East Central Ontario
04.	Western Ontario	09.	Eastern Ontario
05.	Mid-Western Ontario	10.	Ottawa Valley

[b] - Includes wrong numbers, busy numbers, unlisted numbers and no information about the respondent.

[c] - 4 refused, 2 deceased, 2 omitted in the original sample (1973).

[d] - 1 refused, 2 deceased.

[e] - 16 refused, 1 lost in the mail.

TABLE A.2: STAGE 1: RESULTS OF TRACING PROCEDURES BY STRATUM

Stratum[a] Number	No. of Schools	No. of Selected Students	Mail-Out Completions		Mail-Out Attrition	Tracing by Phone Completions	Tracing by Phone Attrition		Contacts of Nonrespondents By Phone Completions	Contacts of Nonrespondents By Phone Attrition	
			1st	2nd			No Information[b]	Other		No Information[b]	Other
1	22	535	205	67	3	30	82	1	45	70 29*	3
2	24	564	202 1*	57	1	71 6*	67		122 4*	33	6
3	24	618	218	65 1*	1	73	81		120 6*	43	4
4	34	838	287	87	3	174 2*	103	2	130 2*	44	4
TOTAL	104	2555	912 1*	276 1*	8[c]	348 8*	333	3[d]	417 41*	190	17[e]
			913	277	8[c]	356	333	3[d]	458	190	17[e]

* - Represents questionnaires received after the cut-off date or completions with mailing addresses only.

[a] - School Boards

Stratum 1	Metro Toronto
Stratum 2	Other large metropolitan areas
Stratum 3	Smaller cities, towns and urban fringe areas
Stratum 4	Other areas - mainly rural

[b] - Includes wrong numbers, busy numbres, unlisted numbers and no information about the respondent.

[c] - 4 refused, 2 deceased, 2 omitted in the original sample (1973)

[d] - 1 refused, 2 deceased.

[e] - 16 refused, 1 lost in the mail.

FIGURE A.1: HISTOGRAM SHOWING DISTRIBUTION OF MAIL RETURNS

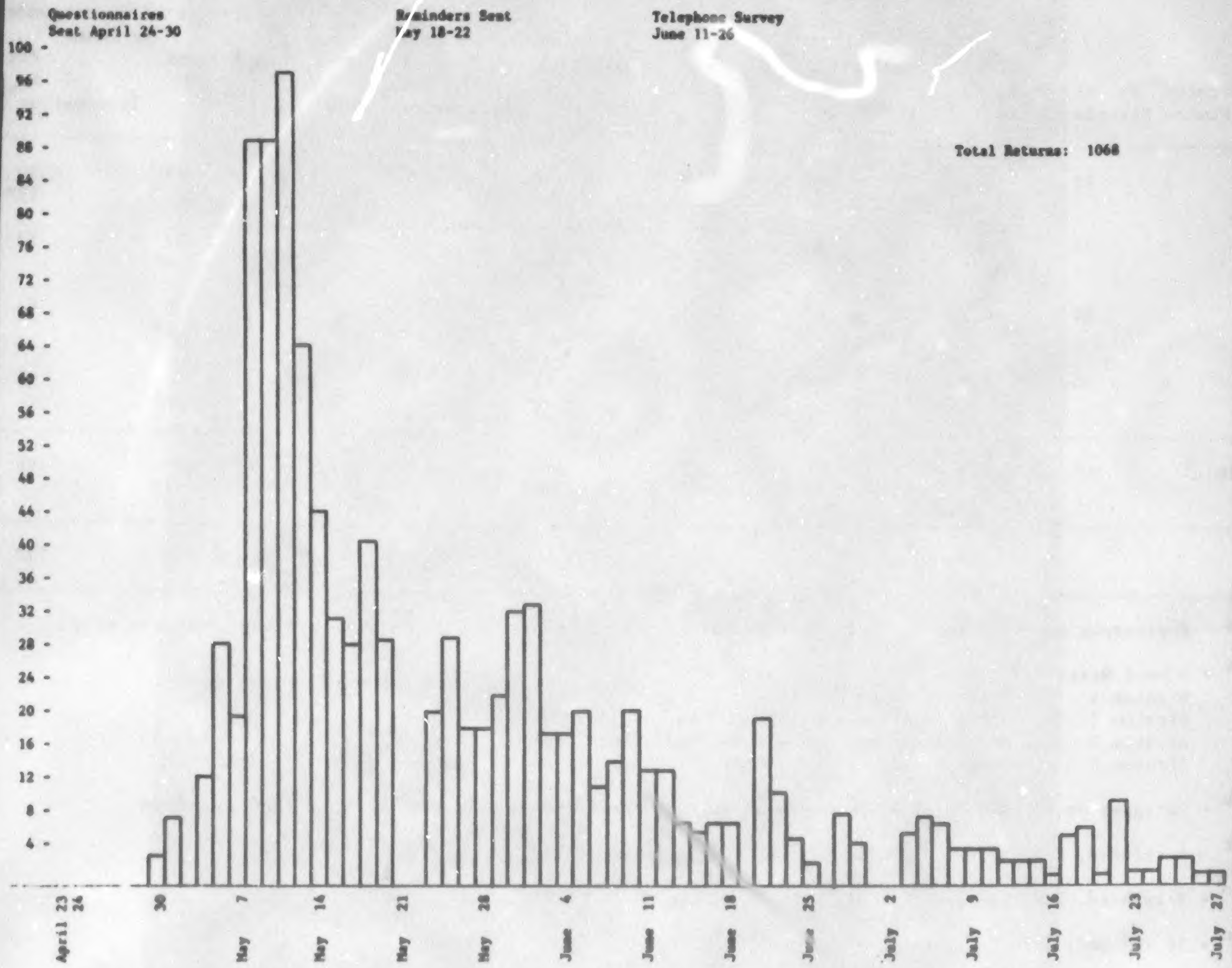

FIGURE A.2: HISTOGRAM SHOWING DISTRIBUTION OF COMPLETED TELEPHONE INTERVIEWS

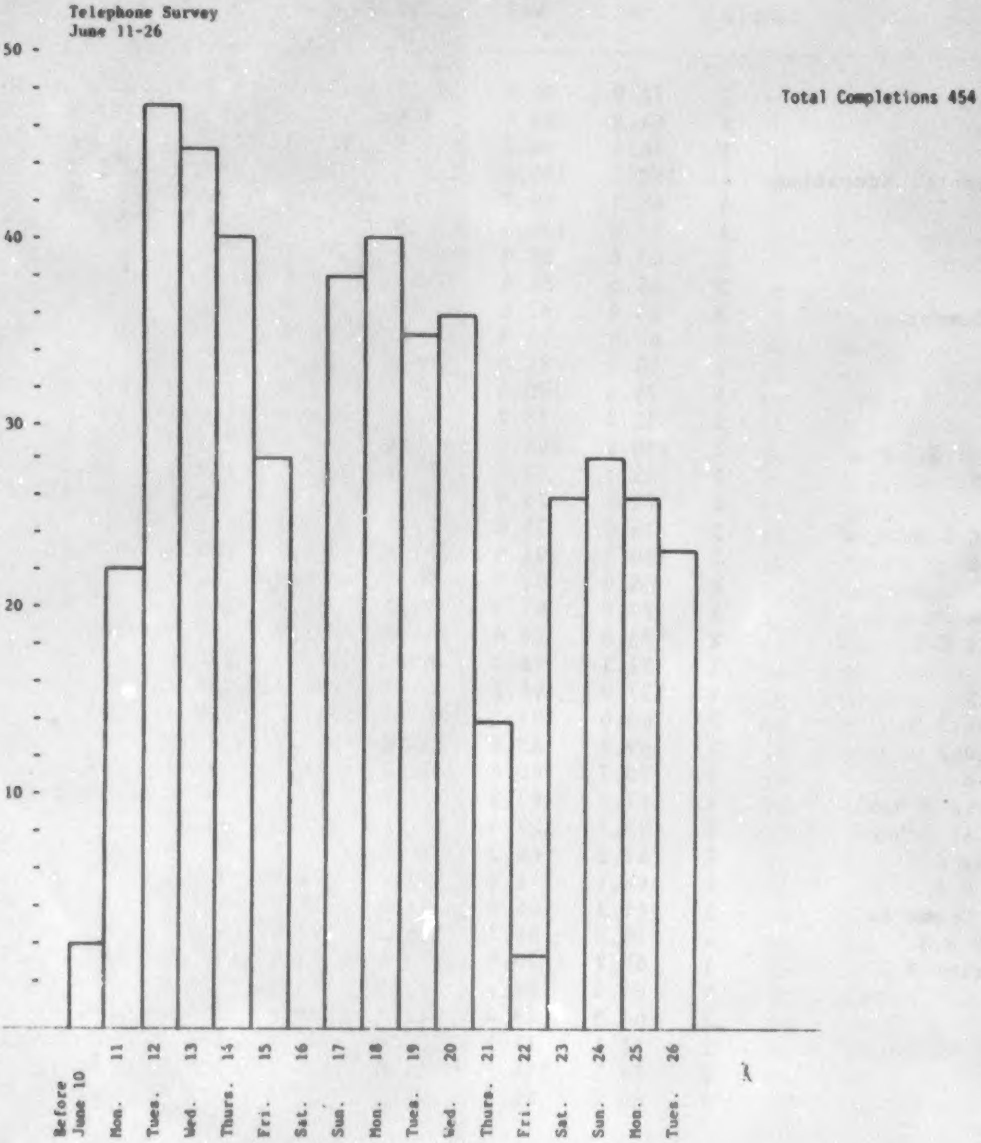

TABLE A.3: PROJECT 223 HALF SAMPLE WEIGHTS BY SCHOOL

School	School Name	Sample	W1	W12	W13	W123	W14	W124	W134	W1234
1	Etobicoke C.I.	2	72.9	90.5	94.9	96.1	117.7	153.9	158.1	170.8
2	North Albion C.I.	2	64.2	82.8	122.6	102.6	183.6	197.5	254.6	213.7
3	Richview C.I.	1	90.1	94.7	110.5	111.3	172.1	172.1	180.8	172.1
4	School of Experimental Education	1	130.1	140.6	152.3	140.6	187.9	210.9	228.3	210.9
5	Silverthorn C.I.	1	65.1	69.7	77.2	74.9	91.9	96.2	98.2	96.2
6	Thistletown C.I.	1	81.6	100.4	133.9	72.5	186.5	217.4	267.7	145.0
7	West Humber C.I.	2	65.6	68.3	80.2	77.1	136.3	136.5	167.6	161.4
8	Bloor C.I.	2	65.6	65.6	68.1	68.1	177.1	177.1	176.9	176.9
9	Central H.S. of Commerce	2	64.4	87.6	111.1	87.6	153.1	175.3	238.1	175.3
10	Humberside C.I.	1	67.5	70.3	82.0	79.0	135.0	135.6	164.0	158.0
11	Malvern C.I.	1	75.6	82.4	89.5	82.4	135.0	135.2	147.1	135.2
12	Oakwood C.I.	1	75.4	100.4	110.7	100.4	150.9	200.8	200.6	200.6
15	A.Y. Jackson S.S.	2	72.9	75.7	89.5	86.0	126.4	126.2	140.6	135.1
16	Bathurst Heights S.S.	2	130.9	246.0	461.2	246.0	327.1	328.0	614.9	328.0
17	C.W. Jeffreys S.S.	1	65.1	71.1	88.3	83.6	138.0	146.5	170.7	167.5
18	Emery C.I.	2	72.1	74.9	91.3	88.0	144.2	144.4	174.9	168.8
19	Northview Heights S.S.	1	75.0	75.0	79.0	79.0	115.4	115.4	115.4	115.4
20	Victoria Park S.S.	2	180.1	191.0	202.3	191.0	324.3	324.7	343.9	324.7
21	Cederbrae C.I.	2	68.9	71.7	90.5	86.8	110.3	117.7	132.3	126.8
22	David & Mary Thomson C.I.	1	77.8	81.0	84.2	84.4	144.6	155.8	150.3	155.6
23	Winston Churchill C.I.	2	73.3	86.4	102.0	91.9	146.6	163.2	173.3	163.4
24	St. George's C.	1	71.1	78.2	82.0	82.4	120.4	130.3	143.4	142.4
25	Confederation S.S.	1	157.0	196.2	245.3	196.2	196.2	196.2	245.3	196.2
26	MacDonald Cartier S.S.	2	66.6	133.3	283.3	141.8	119.3	151.1	302.3	151.3
27	Garsun-Falconbridge	2	69.3	83.8	107.0	93.7	93.7	99.6	137.5	113.7
28	Lo-Ellen Park S.S.	1	70.7	80.6	84.2	84.6	113.1	130.1	129.1	130.1
29	Lockerby Composite School	1	67.5	67.5	67.5	67.5	97.8	97.8	97.8	97.8
30	Sheridan Technical School	2	93.7	127.4	147.0	127.4	156.1	175.3	238.9	175.3
31	Hon. W.C. Kennedy C.I.	2	61.2	64.2	70.7	70.9	103.6	103.8	117.7	112.3
32	John L. Forster C.I.	1	65.1	74.9	80.2	74.9	102.8	114.5	124.8	114.5
33	Windsor H.S. of Commerce	2	61.2	66.0	81.0	78.6	103.2	117.9	118.7	117.7
34	The London South S.S.	1	75.2	88.7	115.2	97.6	139.8	162.6	192.1	162.8
35	Sir Wilfrid Laurier S.S.	1	67.7	70.5	73.5	73.5	112.9	112.9	117.6	112.7
36	Grand River C.I.	2	84.4	88.7	93.1	93.3	126.6	136.3	133.1	136.3
37	Sherwood S.S.	2	64.0	79.4	111.1	96.3	192.0	192.7	277.7	224.8
38	Westmount S.S.	1	71.1	71.1	75.6	75.6	106.5	106.5	106.5	106.5
39	Gloucester H.S.	2	74.5	114.1	145.8	114.1	100.8	142.6	187.4	142.6
40	Marivale H.S.	1	86.9	86.9	91.3	91.3	121.8	121.8	130.5	130.5

TABLE A.3: (cont'd)

School	School Name	Sample	W1	W12	W13	W123	W14	W124	W134	W1234
41	Sir Robert Borden H.S.	1	90.1	100.0	131.3	135.6	157.6	158.4	210.1	189.9
41	Sir Robert Borden H.S.	2	77.1	88.7	81.6	98.5	197.1	221.5	181.3	221.7
42	Canterbury H.S.	1	65.1	72.9	81.6	79.2	[illegible]	101.2	113.3	113.9
43	Ecole Secondaire de La Salle	2	63.2	67.6	75.7	[illegible]	[illegible]	130.5	151.5	140.6
44	Glebe C.I.	2	63.0	76.9	97.7	[illegible]	[illegible]	138.5	169.4	138.5
45	Sir Wilfrid Laurier H.S.	2	61.2	73.5	97.9	[illegible]	[illegible]	122.6	135.7	133.7
46	Woodraff H.S.	1	108.9	123.2	158.4	[illegible]	[illegible]	151.7	184.8	164.2
47	Hillcrest H.S.	1	71.1	74.7	91.3	87.1	[illegible]	130.7	164.4	156.8
48	Bawating C. and V.S.	1	73.5	83.8	95.6	92.5	92.9	103.6	111.5	109.9
49	Korah College and V.S.	1	65.1	78.8	82.4	78.8	115.2	124.8	139.4	124.8
50	Widdifield S.S.	2	63.2	73.3	75.9	76.3	114.5	122.2	141.8	130.9
51	Beamsville District S.S.	2	75.1	91.7	118.3	103.2	127.2	150.0	183.0	165.2
52	Grantham H.S.	1	88.1	93.5	93.5	93.5	124.8	124.6	132.5	124.6
53	Grimsby District S.S.	2	84.4	88.7	97.9	98.5	118.1	118.1	124.0	118.3
54	Lakeport S.S.	1	71.7	89.7	95.0	90.3	143.4	205.0	180.6	206.3
55	Niagara District S.S.	2	89.1	89.1	91.1	91.1	103.2	103.2	105.4	105.4
56	Niagara Falls College and V.S.	1	65.1	114.1	199.6	114.1	114.1	165.9	290.3	165.9
57	Welland Centennial S.S.	1	70.3	83.0	93.9	91.3	121.8	130.3	154.3	140.4
57	Welland Centennial S.S.	2	81.6	81.6	95.1	95.1	122.4	122.4	122.4	122.4
58	Aldershot H.S.	2	67.0	74.5	92.5	90.7	122.2	130.5	154.1	149.0
59	Glenforest S.S.	1	65.1	69.7	74.9	84.2	119.4	119.0	122.6	130.1
60	Lorne Park S.S.	1	65.1	67.1	74.7	74.9	97.6	97.4	111.9	108.1
61	Streetsville S.S.	2	63.2	65.0	71.9	69.7	85.2	88.7	95.9	92.9
62	Thomas L. Kennedy S.S.	1	72.1	75.0	94.7	91.3	174.3	175.0	197.8	190.9
63	Westwood S.S.	2	70.1	77.1	87.4	82.4	113.5	113.9	131.1	119.5
64	Orillia District C. and V.I.	2	72.9	90.5	103.4	104.8	117.7	139.7	172.3	167.6
65	Dunbarton H.S.	2	66.4	73.1	88.4	85.2	138.9	139.5	152.9	139.5
66	Port Perry H.S.	2	71.9	81.2	86.2	81.2	122.2	152.3	153.3	152.3
67	Bayview S.S.	1	69.7	112.3	147.9	118.8	126.3	252.7	271.1	252.5
68	Sutton District S.S.	1	67.5	85.1	103.0	88.9	93.3	108.7	137.2	115.0
69	Notre Dame College	2	81.6	183.6	550.7	244.8	146.8	275.2	708.0	314.6
70	Pickering College	1	71.7	95.2	126.9	109.9	179.2	178.6	238.0	178.6
71	Blind River District H.S.	2	104.0	148.6	185.8	173.5	208.0	260.1	371.6	346.9
72	Chapleau H.S.	1	65.1	97.8	146.7	105.3	227.9	228.3	342.4	228.3
73	Iroquois Falls S.S.	1	65.1	79.4	85.5	83.0	107.3	114.1	130.9	114.1
73	Iroquois Falls S.S.	2	73.3	96.7	134.3	114.9	183.2	229.8	268.6	229.8
74	Roland Michener S.S.	1	73.7	112.7	123.4	120.6	121.0	168.9	185.0	168.9
75	Almaquin Highland S.S.	1	83.0	122.0	149.1	140.8	130.3	166.3	244.0	203.4

TABLE A.3: (cont'd)

School	School Name	Sample	W1	W12	W13	W123	W14	W124	W134	W1234
75	Almaquin Highlands S.S.	2	66.0	78.6	89.3	86.8	91.7	97.1	115.5	103.2
76	West Elgin S.S.	2	61.2	65.4	67.6	65.4	111.7	118.5	119.3	118.5
77	The District S.S. Essex County	1	65.1	76.2	82.4	79.6	92.7	103.2	114.5	109.5
77	The District S.S. Essex County	2	63.4	68.5	71.1	71.3	84.6	89.1	95.9	93.7
78	Central Huron S.S.	1	77.8	84.0	87.3	87.5	112.5	125.9	128.5	134.3
79	Lambton Central C. and V.I.	2	61.2	65.4	65.4	65.4	89.1	93.5	95.1	95.1
80	John Diefenbaker S.S.	1	83.4	136.6	164.0	150.3	125.0	166.0	223.6	187.9
81	West Hill S.S.	1	65.1	84.8	92.9	89.3	89.1	121.0	128.9	130.5
82	Huron Park S.S.	2	61.2	71.7	80.0	75.3	75.3	89.1	95.5	91.9
83	Centre Wellington S.S.	1	80.6	125.0	71.5	71.5	152.3	229.1	135.0	131.1
84	John F. Ross C. and V.I.	1	69.7	80.8	101.8	91.9	112.3	112.3	137.6	118.8
85	Norwell District S.S.	1	83.4	115.0	121.8	115.0	125.0	149.5	172.5	149.5
85	Norwell District S.S.	2	61.2	70.9	86.6	79.2	74.7	84.2	91.7	84.0
86	Cayuga S.S.	2	84.2	103.6	110.5	103.6	134.7	134.7	165.6	134.7
87	Simcoe Composite S.	2	70.3	118.7	213.7	126.6	111.7	158.3	267.0	158.3
88	Ancaster High and V.S.	2	81.6	93.1	101.6	97.7	139.9	150.4	159.5	150.4
89	Parkside C.I.	1	78.2	223.8	497.2	223.8	130.3	391.7	895.1	391.7
89	Parkside C.I.	2	76.5	153.1	340.1	170.0	139.1	191.2	382.5	191.2
90	Sydenham H.S.	2	64.4	76.7	81.0	76.7	94.1	111.7	112.1	111.7
91	Central Hasting S.S.	1	85.7	108.9	129.3	116.6	163.0	163.4	206.9	163.4
92	North Hastings S.S.	2	87.2	151.9	208.8	160.3	151.5	240.5	294.8	240.5
93	North Grenville H.S.	1	65.1	74.3	91.5	86.5	94.9	99.0	113.3	98.9
94	Cobourg District C.I.	1	75.4	80.0	89.5	84.8	102.4	102.8	117.0	110.9
95	Crestwood S.S.	1	85.1	100.0	113.9	107.7	178.0	200.0	250.5	228.9
96	Prince Edward C.I.	1	86.9	101.8	112.5	101.8	140.4	152.7	164.4	152.7
97	Ecole Secondaire de Plantagenet	2	61.2	64.8	73.5	74.1	107.8	108.0	121.4	114.9
98	Cornwall College and V.S.	2	61.2	66.6	76.1	69.9	86.4	97.7	114.1	104.8
99	North Dundas District H.S.	1	67.5	82.4	87.5	85.0	94.5	111.5	126.3	116.8

TABLE A.4: STAGE 2: FINAL FIELD REPORT

A. STRATUM 1

School Name	School Number	Selected Students	Mail-Out Completions 1st	Mail-Out Completions 2nd	Mail-Out Completions Total	Mail-Out Attrition	Mail-Out Completion Rate (%)	Telephone Completions	Telephone Attrition	Telephone Completion Rate (%)	Overall Completion Rate (%)
Etobicoke C.I.	2101	21	7	2	9	12	42.9	4	8	33.3	61.9
North Albion C.I.	2102	40	5	3	8	32	20.0	6	26	18.8	35.0
Richview	1103	21	6	4	10	11	47.6	1	10	9.1	52.4
School of Experimental Education	1104	13	2	4	6	7	46.2	3	4	42.9	69.2
Silverthorn C.I.	1105	31	6	7	13	18	41.9	9	9	50.0	71.0
Thistletown C.I.	1106	16	3	0	3	13	18.8	4	9	30.8	43.8
West Humber C.I.	2107	27	6	6	12	15	44.4	1	14	6.7	48.1
Bloor C.I.	2108	27	4	2	6	21	22.2	4	17	19.0	37.0
Central H.S. of Commerce	2109	19	3	1	4	15	21.1	4	11	26.7	42.1
Humberside C.I.	1110	28	3	9	12	16	42.9	2	14	12.5	50.0
Malvern C.I.	1111	25	6	4	10	15	40.0	4	11	26.7	56.0
Oakwood C.I.	1112	32	6	2	8	24	25.0	8	16	33.3	50.0
A.Y. Jackson S.S.	2115	26	6	5	11	15	42.3	4	11	26.7	57.7
Bathurst Heights S.S.	2116	15	4	1	5	10	33.3	1	9	10.0	40.0
C.W. Jefferys S.S.	1117	36	5	3	8	28	22.2	9	19	32.1	47.2
Emery C.I.	2118	28	5	4	9	19	32.1	5	14	26.3	50.0
Northview Heights S.S.	1119	20	9	1	10	10	50.0	3	7	30.0	65.0
Victoria Park S.S.	2120	18	6	3	9	9	50.0	1	8	11.1	55.6
Cedarbrae C.I.	2121	24	4	5	9	15	37.5	6	9	40.0	62.5
David and Mary Thompson C.I.	1122	26	7	3	10	16	38.5	4	12	25.0	53.8
Winston Churchill C.I.	2123	20	5	2	7	13	35.0	3	10	23.1	50.0
St. George's College	1124	22	4	3	7	15	31.8	6	9	40.0	59.1
Stratum 1 Totals		535	112	74	186	349	34.8	92	257	26.4	52.0

TABLE A.4: (cont'd)

B. STRATUM 2

School Name	School Number	Selected Students	Mail-Out Completions 1st	Mail-Out Completions 2nd	Mail-Out Completions Total	Mail-Out Attrition	Mail-Out Completion Rate (%)	Telephone Completions	Telephone Attrition	Telephone Completion Rate (%)	Overall Completion Rate (%)
Confederation S.S.	1225	5	4	0	4	1	80.0	0	1	0.0	80.0
MacDonald Cartier S.S.	2226	34	7	4	11	23	32.4	8	15	34.8	55.9
Garson-Falconbridge S.S.	2227	23	7	4	11	12	47.8	6	6	50.0	73.9
Lo-Ellen Park S.S.	1228	24	6	3	9	15	37.5	6	9	40.0	62.5
Lockerby Composite School	1229	29	12	3	15	14	51.7	5	9	35.7	69.0
Sheridan Technical School	2230	15	4	1	5	10	33.3	4	6	40.0	60.0
Hon. W.C. Kennedy C.I.	2231	22	6	4	10	12	45.5	3	9	25.0	59.1
John L. Forster C.I.	1232	30	11	2	13	17	43.3	6	11	35.3	63.3
Windsor H.S. of Commerce	2233	27	9	1	10	17	37.0	6	11	35.3	59.3
The London South S.S.	1234	13	4	1	5	8	38.5	2	6	25.0	53.8
Sir Wilfrid Laurier S.S.	1235	25	4	6	10	15	40.0	5	10	33.3	60.0
Grand River C.I.	2236	21	6	4	10	11	47.6	4	7	36.4	66.7
Sherwood S.S.	2337	21	4	2	6	15	28.6	1	14	6.7	33.3
Westmount S.S.	1238	33	6	7	13	20	39.4	9	11	45.0	66.7
Gloucester H.S.	2239	23	3	5	8	15	34.8	9	6	60.0	73.9
Marivale H.S.	1240	21	8	2	10	11	47.6	5	6	45.5	71.4
Sir Robert Borden H.S.	1241	21	5	2	7	14	33.3	5	9	35.7	57.1
Sir Robert Borden H.S.	2241	23	5	1	6	17	26.1	3	14	17.6	39.1
Canterbury H.S.	1242	28	10	4	14	14	50.0	6	8	42.9	71.4
Ecole Secondaire de La Salle	2243	29	5	9	14	15	48.3	1	14	6.7	51.7
Glebe C.I.	2244	33	12	1	13	20	39.4	2	18	10.0	45.5
Sir Wilfrid Laurier H.S.	2245	24	4	3	7	17	29.2	7	10	41.2	58.3
Woodraff H.S.	1246	18	7	4	11	7	61.1	2	5	28.6	72.2
Hillcrest H.S.	1247	22	6	3	9	13	40.9	3	10	23.1	54.5
Stratum 2 Totals		564	155	76	231	333	41.0	108	225	32.4	60.1

TABLE A.4: (cont'd)

C. STRATUM 3

School Name	School Number	Selected Students	Mail-Out					Telephone			Overall Completion Rate (%)
			Completions 1st	Completions 2nd	Completions Total	Attrition	Completion Rate (%)	Completions	Attrition	Completion Rate (%)	
Bawating C. and V.S.	1348	24	9	4	13	11	54.2	6	5	54.5	79.2
Korah College and V.S.	1349	23	6	3	9	14	39.1	4	10	28.6	56.5
Widdifield S.S.	2350	29	10	2	12	17	41.4	4	13	23.5	55.2
Beamsville District S.S.	2351	22	5	4	9	13	40.9	4	9	30.8	59.1
Grantham H.S.	1352	17	7	4	11	6	64.7	1	5	16.7	70.6
Grimsby District S.S.	2353	21	5	6	11	10	52.4	4	6	40.0	71.4
Lakeport S.S.	1354	20	3	3	6	14	30.0	4	10	28.6	50.0
Niagara District S.S.	2355	22	12	5	17	5	77.3	2	3	40.0	86.4
Niagara Falls C. and V.I.	1356	28	6	4	10	18	35.7	6	12	33.3	57.1
Welland Centennial S.S.	1357	26	9	3	12	14	46.2	3	11	21.4	57.7
Welland Centennial S.S.	2357	21	4	6	10	11	47.6	4	7	36.4	66.7
Aldershot H.S.	2358	31	10	4	14	17	45.2	3	14	17.6	54.8
Glenforest S.S.	1359	44	8	9	17	27	38.6	7	20	25.9	54.5
Lorne Park S.S.	1360	30	10	8	18	12	60.0	2	10	16.7	66.7
Streetsville S.S.	2361	31	13	4	17	14	54.8	6	8	42.9	74.2
Thomas L. Kennedy S.S.	1362	29	3	5	8	21	27.6	4	17	19.0	41.4
Westwood S.S.	2363	34	10	8	18	16	52.9	3	13	18.8	61.8
Orillia District C.& V.I.	2364	21	5	4	9	12	42.9	4	8	33.3	61.9
Dunbarton H.S.	2365	23	8	2	10	13	43.5	1	12	7.7	47.8
Port Perry H.S.	2366	17	4	2	6	11	35.3	4	7	36.4	58.8
Bayview S.S.	1367	29	11	3	14	15	48.3	2	13	13.3	55.2
Sutton District S.S.	1368	29	12	3	15	14	51.7	6	8	42.9	72.4
Notre Dame College	2369	27	5	3	8	19	29.6	7	12	36.8	55.6
Pickering College	1370	20	5	1	6	14	30.0	2	12	14.3	40.0
Stratum 3 Totals		618	180	100	280	338	45.3	93	245	27.5	60.4

TABLE A.5:

D. STRATUM 4

School Name	School Number	Selected Students	Mail-Out					Telephone			Overall Completion Rate (%)
			Completions			Attrition	Completion Rate (%)	Completions	Attrition	Completion Rate (%)	
			1st	2nd	Total						
Blind River District H.S.	2471	10	2	1	3	7	30.0	2	5	28.6	50.0
Chapleau H.S.	1472	21	4	2	6	15	28.6	0	15	0.0	28.6
Iroquois Falls S.S.	1473	28	7	7	14	14	30.0	3	11	21.4	60.7
Iroquois Falls S.S.	2473	25	9	1	10	15	40.0	0	15	0.0	40.0
Rolland Michener S.S.	1474	23	6	5	11	12	47.8	3	9	25.0	60.9
Almaguin Highlands S.S.	1475	22	8	3	11	11	50.0	4	7	36.4	68.2
Almaguin Highlands S.S.	2475	25	9	4	13	12	52.0	4	8	33.3	68.0
West Elgin	2476	31	9	1	10	21	32.3	7	14	33.3	54.8
The District S.S. Essex County	1477	27	7	4	11	16	40.7	8	8	50.0	70.4
The District S.S. Essex County	2477	28	7	7	14	14	50.0	7	7	50.0	75.0
Central Huron S.S.	1478	26	8	6	14	12	53.8	4	8	33.3	69.2
Lambton Central C. & V.I.	2479	32	9	3	12	20	37.5	10	10	50.0	68.8
John Diefenbaker S.S.	1480	18	3	7	10	8	55.6	2	6	25.0	66.7
West Hill S.S.	1481	26	10	2	12	14	46.2	7	7	50.0	73.1
Huron Park S.S.	2482	48	18	7	25	23	52.1	14	9	60.9	81.3
Centre Wellington District H.S.	1483	17	4	2	6	11	35.3	3	8	27.3	52.9
John F. Ross C. & V.I.	1484	29	11	3	14	15	48.3	4	11	26.7	62.1
Norwell District S.S.	1485	18	5	2	7	11	38.9	5	6	45.5	66.7
Norwell District S.S.	2485	22	8	3	11	11	50.0	7	4	63.6	81.8
Cayuga	2486	16	6	2	8	8	50.0	2	6	25.0	62.5
Simcoe Composite School	2487	27	8	4	12	15	44.4	5	10	33.3	63.0
Ancaster H. & V.S.	2488	24	7	2	9	15	37.5	5	10	33.3	58.3
Parkside C.I.	1489	20	8	2	10	10	50.0	2	8	20.0	60.0
Parkside C.I.	2489	20	5	2	7	13	35.0	4	9	30.8	55.0

TABLE A.5: (cont'd)

D. STRATUM 4

School Name	School Number	Selected Students	Mail-Out					Telephone			Overall Completion Rate (%)
			Completions			Attrition	Completion Rate (%)	Completions	Attrition	Completion Rate (%)	
			1st	2nd	Total						
Sydenham H.S.	2490	19	7	3	10	9	52.6	3	6	33.3	68.4
Centre Hastings S.S.	1491	19	5	2	7	12	36.8	3	9	25.0	52.6
North Hastings S.S.	2492	33	6	8	14	19	42.4	5	14	26.3	57.6
North Grenville District H.S.	1493	32	9	9	18	14	56.3	4	10	28.6	68.8
Cobourg District C.I.	1494	19	6	5	11	8	57.9	3	5	37.5	73.7
Crestwood S.S.	1495	23	3	5	8	15	34.8	3	12	20.0	47.8
Prince Edward C.I.	1496	21	5	1	6	15	28.6	7	8	46.7	61.9
Ecole Secondaire de Plantagenet	2497	37	5	7	12	25	32.4	9	16	36.0	56.8
Cornwall C. & V.S.	2498	24	5	7	12	12	50.0	5	7	41.7	70.8
North Dundas District H.S.	1499	28	7	6	13	15	46.4	7	8	40.7	71.4
Stratum 4 Totals		838	236	135	371	467	44.3	161	306	34.5	63.5
Overall Totals		2555	683	385	1068	1487	41.8	454	1033	30.5	59.6

APPENDIX B

OPERATIONAL RULES FOR CONSTRUCTING COMMONLY-USED VARIABLES IN THIS REPORT

Considering all four phases of this study, there are around 500 variables which have been recorded for each individual in the sample. In this section, we will describe the operational rules used in constructing variables that are combinations or recodes of the original items in the questionnaire. We report only on variables relevant to this report. All computer work was carried out at the York-Ryerson Computer Centre, utilizing SPSS.

Variables Constructed from a Factor Analysis of Appropriate Items

Factor analysis was used to reduce the information presented in many variables to a smaller set of factors or components. This technique allows the construction of scales that are simply linear combinations of the original items. Throughout the study, we have consistently employed a particular type of factor analysis that extracts initial factor solutions that are exact mathematical transformations of the original variables (PA1 with listwise deletion in SPSS), and then rotates these factors via the varimax (orthogonal) rotation method to facilitate the interpretation of the results. Experimentation with other methods of extraction (PA2), followed by varimax or other rotation methods, resulted in factors that tended to be highly associated with respective factors from the initial method we used, but which, in most

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* Prepared by Norman Okihiro

cases, were more difficult to interpret. In constructing scales from items, our preference has been to employ a term for all the original variables (complete estimation), rather than employing only those variables that have a substantial loading. Again, experimentation indicated that it does not make much difference which procedure is used, since the two results highly correlate.

It is important to note that scale construction took place at different phases (and thus with different subsamples). However, once a scale was defined, we used it in all subsequent analyses and reports, the advantage of this procedure being that it gives continuity between articles and reports from the different phases. By using the same mathematical transformations of the original variables from phase to phase to define our scales, we insure that whatever we are measuring is the same across all phases of the study.

The process of scale construction by factor scores results in interval-level variable that makes possible the use of statistical analyses, such as analysis of variance and T-tests using the individual raw scores produced by the factor analysis. However, for tabular analysis, many factor-score variables were divided into four categories or dichotomized. The general procedure used was to divide at the mean, and, where four categories were being used, at about ± 2/3 of a standard deviation. This procedure divides the sample population into approximate quartiles on the relevant variable, assuming that the variable is normally distributed over the population. For some variables, however, distributions were skewed to such an extent that further adjustments of the category boundaries were necessary. In any case, the category boundaries are cited below.

One final methodological point with regard to scale construction should be made. Each respondent was assigned a score on a factor-based scale whenever he or she answered a fixed proportion of the items forming the basis of the scale. This fixed proportion varied, but was always greater than half of the total number of items. If the respondent answered fewer questions, his or her score was classed as "missing."

Variables Created on the Basis of Previous Phases and Research

Some of the variables created through factor analysis and used in Phase IV were initiated in previous research and were based on previous phases. In particular, the subgroup consisting of all respondents who participated in Phases I, II, and III (N = 1987 or 77.8% of the original sample of 2,555) was used as the basis of the development of our SES, self-concept, and post-secondary educational encouragement scales. In creating these scales, this subgroup was used without weighting; it is not likely that the factor coefficients obtained in this way would differ much from those we would have obtained using a weighting. The relevant factor variables for SES and self-concept are described below:

SESPA1. Socioeconomic status is based on the first factor derived from the five items indicated below:

Item (Phase I)	Description	Factor Score Coefficient
40a	Mother's education 1973	.30147
40b	Father's education 1973	.30185
41	Parents total income 1973	.24517
42	Father's 1973 occupation (raw score)	.25685
44	Mother's 1973 occupation (raw score)	.27704

SESQUART. SES recoded into four categories as follows:

1.	-	.470	to	-.159	Low
2.	-	.15899	to	-0.10	
3.	-	.00999	to	.139	
4.	-	.13901	to	.640	High

USCA1, **FSCA1**. Both scales are taken from a factor analysis of seven items adapted from Brookover's self-concept-of-ability scale. Our factor analysis revealed two identifiable factors: self-concept of ability to do post-secondary education (USCA1), and self-concept of ability relative to friends and schoolmates (FSCA1).

Item (Phase 1)	Description	Factor Score Coefficient	
		USCA1	FSCA1
20	Relative to close friends	.06203	.33721
21	Relative to classmates	.04716	.33523
22	Rank in year	.10697	.37119
23	Ability to graduate from university	.48539	.11719
24	Ability to graduate from CAAT	.44350	.13176
25	Ability to do graduate work	.44218	.12770
26	Own opinion re school work	.13185	.33469

USCAIR. USCAI recoded as follows:

1. - .505 to - .103 Low
2. - .10299 to - .003
3. - .00299 to - .097
4. - .09701 to - .335 High

FSCAIR. FSCAI recoded as follows:

1. - .468 to - .096 Low
2. - .09599 to - .004
3. - .00401 to - .104
4. - .10401 to - .427 High

Variables Created by Factor Analysis of Phase IV Items

There were several series of items in Phase IV which loaned themselves to factor analysis, thus greatly reducing the amount of information processing required to find patterns in the data. In proceeding with the factor analysis, we used unweighted data. This procedure follows the one previously used with our other factor scores; the results, in all likelihood, would be very similar if weighted data had been used. Once again, a principal-components varimax rotation (PA1) was used (with listwise deletion) and a respondent was given a score only if he answered a fixed proportion of the relevant items.

EDUSE6. This scale measured general educational usefulness, and was based on items asked of all 1,522 Phase IV respondents, though the telephone respondents were given only three of the five options ("very useful," "reasonably useful," or "not at all useful").*

The item A.6 asked the respondent to reflect on his or her most recent educational experience and indicate the extent to which it was useful in specific ways. One major factor emerged.

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* Refer to Chapter Two for an analysis of the effects of truncated categories.

Item (Phase IV)	Description	Factor Score Coefficient
A.6a	Appreciation of ideas	.25207
b	Ability to think	.25513
c	Leadership ability	.24256
d	Evaluate life goals	.26453
e	Social and interpersonal skills	.23412
f	Decide on career	.19239

EDUSE6R. Eduse 6 was recorded as follows:

1.	- 2.78	to	- .11	Highly useful
2.	- .10999	to	0	
3.	.00001	to	.11000	
4.	.11001	to	4.85	Low usefulness

JOBUSE. This scale measured what we identified as the perceived job-related usefulness of the respondent's education. The items it comprised include A.6a to A.6f and A.6g and A.6h, the latter group used only for those who were currently working. Thus, the subpopulation on which it is based is different from the general educational usefulness (EDUSE6) scale. Though two main factors emerged, the first appeared to be similar in content to EDUSE6. The second factor loaded on job-related items.

Item (Phase IV)	Description	Factor Score Coefficient
A.6a	Appreciation of ideas	-.11822
b	Ability to think clearly	-.13372
c	Leadership ability	-.03945
d	Evaluate life goals	.03499
e	Social and interpersonal skills	-.03239
f	Decide on career	.40565
g	Provide job skills, techniques	.44988
h	Increase good job chances	.42716

JOBUSER. JOBUSE was recoded as follows:

1.	- .345	to	- .08	Highly useful
2.	- .07999	to	.001	
3.	.00101	to	.08	
4.	.08001	to	.287	Low usefulness

BROAD, IMMED. These scales concern different ways in which people identify and solve problems in various activities. The factor analysis is based on the amount of agreement each respondent expressed towards a series of statements. The scoring for items D.4b, D.4e, and D.4f was reversed. Only persons answering by mail were asked these items. For a description of the items, refer to the questionnaire. Two factors emerged which, on the basis of the factor loadings, we interpreted as preference for solving broad, open-ended problems (BROAD), and preference for tackling and solving more immediate problems with clear solutions (IMMED).

Item (Phase IV)	Factor Score Coefficient BROAD	 IMMED
D.4a	.15502	.33018
b	.37035	-.02439
c	-.06333	.52383
d	-.31951	.47754
e	.39164	.02643
f	.39615	.06023
g	.07995	.31921

BROADCAT, IMMEDCAT. BROAD, IMMED were recoded as follows:

	BROADCAT					IMMEDCAT		
1.	- .57	to	- .094	Low	1.	- .379	to	- .094
2.	- .09399		0		2.	- .09399		.002
3.	.00001		.094		3.	.00201		.098
4.	.09401		.431	High	4.	.09801		.625

SELFES, ATTRAC, ACTIVE. These scales were constructed from a factor analysis of sixteen semantic differential items involving self-descriptions. The items were excluded for telephone respondents. The factor analysis resulted in three factors: global or general self-esteem (SELFES); behavior (ACTIVE); personal desirability and attractiveness (ATTRAC).

Item		Factor Score Coefficient		
(Phase IV)	Description	SELFES	ATTRAC	ACTIVE
D.5a	Attractive-unattractive	-.15156	.39570	-.09394
b	Important-unimportant	-.07027	.32887	-.09820
c	Proud-ashamed	-.00232	.08927	.08709
d	Effective-ineffective	.09768	-.00377	.09183
e	Outgoing-shy	-.18990	-.07106	.48870
f	Organized-disorganized	.06730	-.22038	.29136
g	Interesting-boring	-.06383	.09023	.18646
h	Valuable-worthless	.03751	.23390	-.10825
i	Confident-lack confidence	-.05973	.01541	.26801
j	Desirable-undesirable	-.10872	.37341	-.08200
k	Active-passive	-.08514	-.07623	.37642(37642)
l	Intelligent-unintelligent	.16911	.12761	-.17604
m	Quick-slow	.22450	-.14045	.06813
n	Able-unable	.31619	-.11844	-.04881
o	Adequate-inadequate	.29336	-.03214	-.12177
p	Capable-incapable	.33984	-.10986	-.09586

SELFESR, ATTRACR, ACTIVER. These variables were recodes of the semantic-differential factors as follows:

SELFESR	ATTRACR	ACTIVER	
1. -.152 to .040	1. -.185 to -.04	1. -.173 to -.04	High
2. -.03999 to 0	2. -.03999 to 0	2. -.03999 to .001	
3. .00001 to .040	3. .00001 to .04	3. .00101 to .04	
4. .04001 to .286	4. .04001 to .305	4. .04001 to .213	Low

490

FATE. This scale was constructed from six items comprising item D.6, which dealt with people's outlook on life. Each item consisted of a pair of polar statements and the respondent was to indicate his or her own opinion on a seven-point scale. Items D.6b and D.6f were reverse-coded. Again, telephone respondents were excluded. One principal factor emerged, which we have named FATE. Refer to the questionnaire for the exact statements used.

Item (Phase IV)	Factor Score Coefficient
D.6a	.35795
b	-.06825
c	.37499
d	.46885
e	.27873
f	-.14135

FATER. FATE was recoded as follows:

1.	- .55[illegible]	to	- .11000	High fatalism
2.	- .10999	to	.001	
3.	.00101	to	.11000	
4.	.11001	to	.620	Low fatalism

HSATPART, HSNAPART. These two variables are basically summated ratings of items, each of which is equally weighted. The rationale for the construction of these variables emanates from the factor-analysis technique applied to items A.3a through A.3i. Two clear factors emerged, one loading heavily on A.3b and A.3c, the athletic participation variables, and the other on most of the remaining activities. Because of the clear-cut interpretations involved in the pattern of factor loadings, we decided to compute HSATPART, the athletic-participation dimension, as a simple sum of the two relevant items, and HSNAPART as the sum of the remaining items, with all items in standard form. These correlated extremely highly with variables defined, using all of the items for each factor. Telephone respondents were not asked these questions.

HSNAPT4, HSATPT4. These were simple recodes of HSNAPART, HSATPART as follows:

	HSATPT4	HSNAPT4	
1.	1.0 - 2.5	1.0 - 3.999	High participation
2.	2.5001 - 3.5	4.0 - 4.5	
3.	3.5001 - 4.5	4.5001 - 4.8	
4.	4.501 - 5.0	4.8001 - 5.0	Low participation

Other Variables From Phase IV

In many cases, variables have been constructed from the original questionnaire items in a way that is immediately clear, based on tables and/or descriptions in the text. These variables are not discussed here; rather, only variables whose construction is problematic are described.

A12FED, B6AFED, B6BFED, B3FED, FLDLASTF. Items A.12, B.6a, B.6b, B.3, B.9 and FLDLASTF (the type of program in the last year of formal education) were recoded following Statistics Canada divisions.* Both CAAT and university programs are included in these recodes, though only some of the codes are applicable to some questions.

University Programs

1. Education
    01. Education excluding physical, health, and recreation education)
    02. Physical, health, and recreation education
2. Fine, Applied and Performing Arts
    03. Fine, applied, and performing arts (e.g., music, drama, art, history)
3. Humanities and Related
    04. Classics and classical languages
    05. History
    06. English
    07. French
    08. Other modern languages (e.g., Germanic, Romance, and Slavic)
    09. Philosophy
    10. Religious studies (including theology)

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*As appear in Secretary of State, Some Characteristics of Post-Secondary Students in Canada. Cat. No. 52-51/76, pp. 103-106. Ottawa: Ministry of Supply and Services Canada, 1976. This study was conducted by Statistics Canada for the Education Support Branch of the Department of the Secretary of State.

11. Other humanities (including library science, journalism translation, creative writing)

4. Social Science and Related

12. Anthropology

13. Commerce, business administration, administrative studies (excluding public and health administration)

14. Economics (including agricultural economics)

15. Geography (including physical geography)

16. Law (excluding pre-law)

17. Linguistics

18. Man/Environment studies (e.g., regional and urban planning)

19. Political science (including public administration and international relations)

20. Psychology

21. Social work

22. Sociology (including criminology, demography, folklore)

23. Other social services, (including archaeology, area studies, health administration, military studies)

5. Agriculture and Biological Sciences

24. Agriculture

25. Biochemistry, biophysics

26. Biological sciences (including biology, botany and zoology)

27. Household sciences (including home economics and consumer studies)

28. Veterinary medicine, veterinary science

6. Engineering and Applied Sciences
    29. Architecture
    30. Engineering
    31. Other applied sciences (including landscape architecture, forestry)
7. Health Professions and Occupations
    32. Dentistry (excluding pre-dentistry)
    33. Medicine (excluding pre-medicine)
    34. Nursing
    35. Pharmacy
    36. Other health professions (including optometry, public and rehabilitation medicine, audiology, occupational and physical therapy)
8. Mathematics and Physical Sciences
    37. Applied mathematics (including actuarial science, computer science)
    38. Mathematics (including mathematical statistics)
    39. Chemistry
    40. Geology and related (including geophysics)
    41. Physics
    42. Other physical sciences (including metallurgy, meteorology, oceanography)
9. Arts/Science General
    43. Arts and science general (i.e., no major)
    44. Other university program

Community College Programs

50. University transfer of arts and science diploma program

51. Secretarial arts and sciences

52. Business management and commerce (e.g., accounting, finance, advertising, marketing and merchandising, hotel management)

53. Fine, applied and performing arts (e.g., design, graphic arts, photography, music, theatre, library technology)

54. Communications (e.g., radio and television, arts, journalism)

55. Community services, teaching and social welfare (e.g., child-care, early childhood and teacher education, correctional services, law enforcement, recreation)

56. Nursing (diploma programs leading to R.N. only)

57. Data processing (e.g., computer science, programming)

58. Primary industries (e.g., agriculture, forestry, fisheries and mining technologies)

59. Medical and dental technologies (e.g., radiology, medical laboratory, biological)

60. Electronics and electrical technologies

61. Engineering and related technologies (e.g., chemical, civil, mechanical and architectural technologies, drafting, surveying, construction)

62. Other community college program

B6AFLDS, B6BFLDS,, B3FLDS, B3FLDSR. These variables are recodes of the field or program code just listed above. The recodings are as follows:

Code and Description	Two-Digit Codes Included
B6AFLDS, B6BFLDS	
1. Agricultural and biological sciences	24, 25, 26, 27, 28
2. Health professions	32, 33, 34, 35, 36
3. Arts and humanities (including fine arts)	3, 4, 6, 7, 8, 9, 10, 11
4. Physical sciences	37, 38, 39, 40, 41, 42
5. Applied sciences	29, 30, 31
6. Education, physical education, law, social work	1, 2, 16, 21
7. Business and commerce	13, 14
8. Social science	5, 12, 15, 17, 18, 19, 20, 22, 23
9. Other	43, 44

Code and Description	Two-Digit Codes Included
B3FLDS	
1. University transfer, arts and science	50
2. Secretarial arts and science	51
3. Business management and commerce data processing	52, 57
4. Fine, applied and performing arts; communications	53, 54
5. Community services, teaching, social welfare	55
6. Medical and dental technologies, nursing	56, 59
7. Primary industries, electronics and electrical technologies	58, 60
8. Engineering and related technologies	61
9. Other programs	62

B3FLDSR

0. Missing	0
2. Secretarial arts and science	51
3. Business management and commerce	52
4. Fine, applied, and performing arts; communications	53, 54
6. Community services, teaching, social welfare	55
7. Nursing, medical and dental technologies	56, 59
9. Primary industries, electronics and electrical technologies, engineering	58, 60, 61
13. Other programs	50, 57, 62

A1SCHOST, A1WORKST. A large number of responses were given to item A.1, "What do you do most of the time?" A1SCHOST examines these responses from the point of view of educational activities only, whereas A1WORKST is concerned with work status only.

Category	Codes included
A1SCHOST	
1. Full-time student	03 Full-time student 13 Employed full-time and full-time student 23 Employed part-time and full-time student 35 Full-time student and housewife

2. Part-time student	04 Part-time student
	14 Employed full-time and part-time student
	24 Employed part-time and part-time student
	46 Unemployed and part-time student
3. Nonstudent	01 Full-time job
	02 Part-time job
	05 Housewife
	06 Unemployed and looking for work
	12 Employed full-time and part-time
	15 Employed full-time and housewife
	25 Employed part-time and housewife
	56 Unemployed and housewife
	57 Returning to Korea
	58 Sick

A1WORKST (see previous section for two-digit codes)

1. Employed full-time	01, 12, 14, 15, 13
2. Employed part-time	02, 23, 24, 25
3. Unemployed	06, 46, 56
4. Student or housewife	03, 04, 05, 35

C2BLISR, B22BLISR, B23BLISR, BLISR. All of these variables recode the two-digit Blishen scores of occupational prestige into categories as follows:

Category	Blishen score	
1	29 or less	Low Prestige
2	30-39	
3	40-49	
4	50-59	
5	60-69	
6	70 or higher	High prestige

STATR, C2STATR. The occupation reported in items C.2 (current job) and C.22 (first job) were recoded using 1971 Statistics Canada major occupational groups as follows:

Code	Major Group
11	Managerial, administrative, and related occupations
21	Occupations in natural sciences, engineering, and mathematics
23	Occupations in social sciences and related fields
25	Occupations in religion
27	Teaching and related occupations
31	Occupations in medicine and health
33	Artistic, literary, recreational and related occupations
41	Clerical and related occupations
51	Sales occupations
61	Service occupations
71	Farming, horticultural, and animal husbandry occupations
73	Fishing, hunting, trapping, and related occupations
75	Forestry and logging occupations

77	Mining and quarrying, including oil and gas field occupations
81, 82	Processing occupations
83	Machining and related occupations
85	Product fabricating, assembling, and repairing occupations
87	Construction trades occupations
91	Transport equipment operation occupations
93	Materials handling and related occupations n.e.c.
95	Other crafts and equipment operating occupations
99	Occupations, not elsewhere classified

STRATA1, STRATA2. The urban/rural nature of the respondent's high school was coded into four categories based on school location. STRATA2 combined categories 1 and 2, 3 and 4.

Category	Description	School Codes
1	Metropolitan Toronto	1 - 24
2	Other larger cities in Ontario	25 - 47
3	Smaller cities	48 - 70
4	Small towns and rural areas	71 - 99

C3BR. This is a recode of C.3B, which is current-job present pay before taxes, calculated on an annual basis:

1	$1200 - 9996
2	$9997 - 12272
3	$12273 - 14957
4	$14958 - 37201

C3DR. This is a recode of C.3D which is current job starting pay before taxes calculated on an annual basis:

1	$1000 - 7176
2	7177 - 9300
3	9301 -11960
4	11961 -40000

D8R. This is a recode of D.8 which is personal income before taxes for the year 1978:

1	under $4000
2	4000 - 6999
3	7000 - 9999
4	10000 - 14999
5	15000 - or more

PAYSTR. This is a recode of PAYST, which is starting pay in first job, calculated on an annual basis:

1	$600 - 5700
2	5701 - 8005
3	8006 -10300
4	10301 -24001

PAYENDR. This is a recode of PAYEND, which is ending pay in first job, calculated on an annual basis:

1	$2000 - 6000
2	6001 - 8640
3	8641 -11320
4	11321 -60000

FIREQCUR. Since Phase IV respondents were asked about their first full-time jobs and current full-time jobs, and were also asked to fill out a full-time job history table, it was possible to examine whether they had had a number of full-time jobs before their current one, or whether their current job was their first. We developed a variable called FIREQCUR which reflected four labor-force history possibilities, with the following codes: (1) never worked full-time (but could have been or might now be working part-time); (2) not currently working but held full-time job or part-time jobs in the past (could also be now working part-time); (3) current full-time job is different from first full-time job (respondent might have changed full-time jobs one or more times); and, (4) current full-time job is same as first full-time job. The items used to sort respondents into these categories include A.1, C.1, C.19, STAT (Statistics Canada occupational code for first full-time job, as reported in C.22), and C2STAT (Statistics Canada occupational code for current full-time job as reported in C.2).

Given these multiple measures of job history, a small number of anomalous cases appeared. For example, an individual indicated in C.19 that he or she had had a first full-time job at one time, but no information was provided on such a job in C.22; or, an individual reported in A.1 that he or she was employed full-time, but on C.1 stated that he or she was not so employed, and furthermore, did not indicate a current full-time job in C.2 but did report a first full-time job in C.22. After developing a trial assignment program based on the four categories described above, all deviant cases that emerged from responses to variables A.1, C.1, C.19, STAT, and C2STAT were evaluated and re-sorted, either on the basis of revising the assignment program or by a recode on the relevant case of the relevant related variables, using the ID number. The assignment program is not presented here, but is available as part of the code book for the data.

Educational Attainment Variables

In Phase IV, educational attainment proved difficult to determine in a small number of cases, due to confusing and sometimes contradictory data regarding the respondent's educational history. Some respondents indicated attending only universities in B.1, the educational table, but then indicated in B.2 that they only attended CAATs instead of filling out B.5, which was the appropriate item for them. Some respondents indicated a university education in B.1, but in B.10 marked that they had received a diploma, rather than the appropriate response, which was a B.A, or an Honors B.A. Some respondents indicated in B.1 that they attended CAATs and received certificates or diplomas but in B.10 indicated that they received no certificate or diploma.

In order to determine educational attainment, a trial assignment program was developed, and respondents were sorted into the ten categories outlined below. Based on a review of individual responses to items B.1, B.2, B.3, B.5, B.6, B.8, B.9, B.10, B.11a, and B.11b, the deviant cases were re-sorted, either by revising the assignment program or by a recode of the relevant case for the relevant related variables, on the basis of ID number. The assignment program, which is highly complex, is not presented here, but is available as part of the code book for the data. The ten categories of educational attainment are reported below as variable EDACH79D.

EDACH79D. Educational attainment to 1979 in detail was coded as follows:

1. In graduate or professional school
2. University graduate
3. University enrollee but did not graduate
4. CAAT graduate
5. CAAT enrollee but did not graduate
6. University graduate and CAAT enrollee
7. University graduate and CAAT graduate
8. CAAT graduate and university enrollee
9. CAAT enrollee and university enrollee but no degree or diploma
10. No post-secondary education

EDACH79E. Recode of EDACH79D as follows:

1.	University graduate	1, 2, 6, 7
2.	CAAT graduate	4, 8
3.	Some CAAT or university	3, 5, 9
4.	No post-secondary	10

TYPEDUC. Enrollment in post-secondary education was also a recode of EDACH79D as follows:

1.	CAAT enrollment only	4, 5
2.	University enrollment only	1, 2, 3
3.	CAAT and university	6, 7, 8, 9
4.	High school only	10

Other Educational Attainment Variables

Several other variables were defined, using EDACH 79D as a basis. In many cases, this involved a reassignment of missing values. Since, in most cases, their definition is clear from the context, they will not be specified here.

HSPSGAP. Did the respondent take one or more years off between high school graduation and initial enrollment in a post-secondary institution? To answer this question, we constructed this variable by ascertaining from B.1, the educational history table, the last year the respondent was enrolled in high school (LHSYEAR). We then looked at the next year on the educational history table. If the respondent had at one time enrolled in a post-secondary institution (based on B.1), but was coded as missing for that year (that is, was neither at a CAAT or a university), he was classed as a 2; if he had at one time enrolled and was coded as going to a CAAT or university the next year, he was categorized as a 1. If he had never enrolled in a post-secondary institution, he was classed as 3. The recodes are given the following interpretation:

1. No - went directly to a post-secondary institution.
2. Yes - a gap of at least 1 year.
3. Never enrolled in a post-secondary institution

B25AIR, B25A2R, B25B1R, B25B2R. The reasons for returning to school given in B.25a and B.25b (Phase IV) are recoded as follows:

1. General Educational Reasons
    - 01. Returned to continue original education plans/returned to finish degree/certificate.
    - 02. To get more education/wanted to further my education.
    - 05. Wanted to return to get a further degree or certificate in my area.
    - 06. Returned to see if I could do better in school.
    - 13. Dropped out to work and save money so I could continue my education.
    - 16. Wanted to change institution.
2. Job-Related Reasons
    - 08. Needed more education to improve job opportunities to have good employment prospects.
    - 09. To help obtain a different job/career.
    - 10. Changed to a new field or area of study or course to improve job opportunities.
    - 11. Needed degree/certificate to get a particular job or to prepare for a particular career.
    - 12. Job I had offered no future or a career.
    - 14. Wanted to take time off after high school, to travel, to gain work experience.

3. Interest in Field
    03. Was interested in the field; area of study, course.
    04. Became interested in the field; area of study of course.
4. Other Reasons
    07. Returned after recovering from an illness.
    15. To satisfy parents.
    20. Other.

B26AR, B26BR. Recodes of B.26a and B.26b (Phase IV), the two reasons given for dropping out or withdrawing from college or university the first time.

1. Financial
    01. Financial difficulties at home.
2. Academic Reasons
    02. Program of study not what I expected.
    03. Failed or was failing at my studies.
    08. Level of instruction was poor.
    09. Alienation or boredom with studies.
3. Marriage/Health-Related Reasons
    04. Became pregnant.
    06. Got married or wanted to marry.
    07. Poor health or disability.
4. Work-Related Reasons
    05. Wanted to go to work.
    10. Changed my job plans.
5. Other Reasons
    11. Other.

APPENDIX C

Survey Research Centre
Institute for Behavioural Research
York University

PHASE IV

The Class of 1973: Linking Education and Work in Ontario.

Each question is self-explanatory as to the method of answering (e.g. circle one only circle as many as apply, write in answer, etc.). You will need to answer the first question in each of the four sections, but you may not need to answer all the questions in every section. You may even be able to skip an entire section.

All instructions are typed in italics. In order to avoid confusion please follow these instructions carefully.

The questionnaire is divided into the following four sections:

A. High School Experiences
B. Post-Secondary Experiences
C. Work Experiences
D. Personal Values and Attitudes

Please return the questionnaire in the envelope addressed to the Survey Research Centre. We assure you that all information given to us will remain strictly confidential.

P. Anisef
T. Turrittin
G. Paasche

SECTION A: HIGH SCHOOL EXPERIENCES

A.1 What do you do most of the time? (Circle as many as apply)

Employed at a full-time job 1
Employed at a part-time job 2
Full-time student 3
Part-time student 4
Housewife 5
Unemployed and looking for work 6
Other (specify): ______________________________ 7

A.2 In what type of program were you enrolled at high school? (Circle one only)

Academic. 1
Commercial. 2
Technical 3
Vocational. 4
Other (specify): ______________________________ 5
____
Don't Know. 8

A.3 How frequently did you participate in the following activities in high school?

(Circle one number on each line)

	Very frequently	Frequently	Occasionally	Rarely	Never
a. Social clubs.	1	2	3	4	5
b. Athletic varsity or representative teams.	1	2	3	4	5
c. Athletic within school teams.	1	2	3	4	5
d. Music (choir, band, etc.)	1	2	3	4	5
e. Student government.	1	2	3	4	5
f. Drama Clubs	1	2	3	4	5
g. Student newspapers.	1	2	3	4	5
h. Academic clubs (debate, language, etc.)	1	2	3	4	5
i. Political or social action groups	1	2	3	4	5
j. Other (specify): ______________________	1	2	3	4	5

A.4 Would you say you were part of the leading social crowd in your high school?

(Circle one only)

Yes. 1
No 2

A.5 If you could have been remembered at high school for one of the four things below, which one would you have wanted it to be?

(Circle one only)

Brilliant student	1
Leader in activities	2
Most popular	3
Outstanding athlete	4

A.6 Looking back at your most recent educational experience (be it high school, private vocational school, college, university, etc.), please indicate the extent to which it has been useful in each of the following ways:

(Circle one on each line)

	Very Useful	Frequently Useful	Occasionally Useful	Rarely Useful	Not At All Useful
a. Developed my basic appreciation of ideas	1	2	3	4	5
b. Increased my ability to think clearly	1	2	3	4	5
c. Increased my leadership ability	1	2	3	4	5
d. Learned to evaluate my life goals in light of my own opportunities and abilities	1	2	3	4	5
e. Developed my social and interpersonal skills	1	2	3	4	5
f. Helped me decide on a career	1	2	3	4	5
IF NOT CURRENTLY WORKING, GO TO Q. A.7					
g. Provided the knowledge, skills, and techniques that are directly applicable to my present job	1	2	3	4	5
h. Increased my chances of finding a good job	1	2	3	4	5

A.7 Did you interrupt your education after high school? (Circle one only)

No	1	*GO TO Q. A.9 ON PAGE 3*
Yes, I interrupted and never returned	2	
Yes, I interrupted for one or more years but I returned later	3 →	*CONTINUE WITH Q. A.8*

A.8 What were your reasons for returning to education? (Please specify):

A.9 a. Have you ever participated in any of the following schools or programs?

(Circle one number on each line)

	Yes	No
Private Vocational schools	1	2
Adult training	1	2
Apprenticeship	1	2
Short courses (specify): ______________	1	2

b. If you have been involved in one or more of these schools or programs briefly explain your reasons for attending:

c. How did you hear about it and get involved?

A.10 How likely is it that you will enroll in a college or university in the next five years?

(Circle one only)

I am currently enrolled	1	→ *GO TO Q. B.1 ON PAGE 4*
Very likely	2	*CONTINUE WITH Q. A.11*
Somewhat likely	3	
Somewhat unlikely	4	*GO TO Q. B.1 ON PAGE 4*
Not at all likely	5	

A.11 Will this enrollment be on a part-time or full-time basis? (Circle one only)

Part-time	1
Full-time	2

A.12 What type of courses or program are you thinking of?

B.1 *ONLY PEOPLE WHO WERE AT SOME TIME ENROLLED IN DEGREE, DIPLOMA, OR CERTIFICATE PROGRAMS AT UNIVERSITIES, COMMUNITY COLLEGES, OR THE EQUIVALENT (e.g. RYERSON, OR ONTARIO COLLEGE OF ART) SHOULD ANSWER QUESTIONS B.1 THROUGH B.27. ALL OTHERS (INCLUDING THOSE WHO PARTICIPATED IN PRIVATE VOCATIONAL SCHOOLS, APPRENTICESHIP, ADULT TRAINING, OR SHORT COURSES ONLY), GO TO SECTION C, ON PAGE 11.*

SECTION B: POST-SECONDARY EXPERIENCES

We would like to learn about your current and past educational experiences. This includes questions on institutions attended, major areas of study, finances, and satisfaction with education.

Using the table provided below, please indicate for each year the various educational institutions you have attended.

EDUCATIONAL HISTORY TABLE

DATES	NAME OF INSTITUTION (e.g. University of Toronto, Seneca College)	PART-TIME STUDENT (check)	FULL-TIME STUDENT (check)	RECEIVED A DEGREE, CERTIFICATE, OR DIPLOMA THIS YEAR (check)		MAIN FIELD OF STUDY
				Yes	No	
1973-74						
1974-75						
1975-76						
1976-77						
1977-78						
1978-79						

B.2 Were you ever enrolled in a community college diploma or certificate program or equivalent (e.g. Ryerson, Ontario College of Art)?

(Circle one only)

Yes . . . . 1 → *CONTINUE WITH Q. B.3*

No. . . . . 2 → *GO TO Q. B.5 ON PAGE 5*

B.3 In attending a community college diploma or certificate course or equivalent (e.g. Ryerson, Ontario College of Art), what was your most recent program of study? (e.g. Early Childhood Education, Radiology, Computer Science, etc.).

(Write in): ______________________________

B.4 What was the length of this last program in academic years? (If you were a part-time student, answer this question in terms of how long your program would have been had you been a full-time student).

(Circle one only)

1 year	1
2 years.	2
3 years.	3
4 years.	4
More than 4 years.	5

B.5 Have you ever been enrolled in a degree program at a university or equivalent (e.g. Ryerson)?

(Circle one only)

Yes.	1	→ *CONTINUE WITH Q. B.6*
No	2	→ *GO TO Q. B.10 ON PAGE 6*

B.6 In attending university or Ryerson in a degree program what was your most recent undergraduate major field of study? (e.g. Economics, Geography, Biology, etc.). If you have had more than one major field of study, please indicate this also:

(Write in): ____

____

B.7 What was the length of this last program in academic years? (If you were a part-time student, answer this question in terms of how long your program would have been had you been a full-time student.)

(Circle one only)

2 years.	1
3 years.	2
4 years.	3
5 or more years.	4

B.8 Are you now enrolled in either graduate school or professional school?

(Circle one only)

Yes.	1	→ *CONTINUE WITH Q. B.9*
No	2	→ *GO TO Q. B.10 ON PAGE 6*

B.9 Briefly describe your program of study.

____

____

____

B.10 What degrees, certificates or diplomas have you received up to the present time?

(Circle as many as apply)

No degrees, diplomas or certificates	01 → *GO TO Q. B.12*
Diploma or certificate	02
Bachelors degree	03
Bachelor Honors Degree	04
L.L.B. (excluding pre-Law), D.D.S, D.V.M., M.D. or equivalent (excluding pre-Medicine and pre-Dentistry)	05
Graduate diploma or certificate	06
Masters degree	07
Doctoral degree	08
Other (specify): ______________________	09

B.11 Some people have multiple degrees, for example, a B.A. and a B.Ed. What degree(s), certificate(s) or diploma(s) have you received up to the present time. (e.g. B.A., B.Sc., B.Ed., M.A., M.B.A., etc.)?

(Write in): ____

B.12 *QUESTIONS B.12 THROUGH B.27 CONCERN THE COMMUNITY COLLEGE OR UNDERGRADUATE UNIVERSITY OR EQUIVALENT THAT YOU MOST RECENTLY ATTENDED. FOR THOSE NOW IN GRADUATE OR PROFESSIONAL SCHOOLS, ANSWER IN TERMS OF YOUR MOST RECENT UNDERGRADUATE INSTITUTION.*

When you chose your most recent program or major area of study, how important were each of the following factors?

(Circle one number on each line)

	Very Important	Important	Somewhat Important	Not Very Important	Not At All Important
a. Recommendations of parents or relatives	1	2	3	4	5
b. Recommendations of high school teachers or guidance counsellors	1	2	3	4	5
c. Recommendations of friends	1	2	3	4	5
d. Advice of employer	1	2	3	4	5
e. Interest in the area or program	1	2	3	4	5
f. Good employment prospects	1	2	3	4	5
g. High income prospects	1	2	3	4	5
h. Career advancement prospects	1	2	3	4	5
i. Program less difficult than others I was interested in	1	2	3	4	5
j. Courses in high school fitted in well with program or major area chosen	1	2	3	4	5
k. Other (specify): ______________________	1	2	3	4	5

B.13 Please write in the letter that corresponds with the one factor most important to you in choosing your program or major area of study.

(Write in): __________

B.14 What was your approximate cumulative grade point average at this institution (that is, your grade average over the years)?

(Circle one only)

80% - 100% or A or first class 1
70% - 79% or B or second class 2
60% - 69% or C or third class. 3
50% - 59% or D or credit 4
0 - 49% or F or no credit. 5

B.15 Did you leave your home town or city in order to attend this institution?

(Circle one only)

Yes 1
No. 2

B.16 How frequently have you participated in any of the following types of activities in community college or university?

(Circle one number on each line)

	Very Frequently	Frequently	Occasionally	Rarely	Never
a. Social clubs	1	2	3	4	5
b. Athletic varsity or representative teams	1	2	3	4	5
c. Athletic within school teams	1	2	3	4	5
d. Music (choir, band, etc.).	1	2	3	4	5
e. Student government	1	2	3	4	5
f. Drama clubs.	1	2	3	4	5
g. Student newspaper.	1	2	3	4	5
h. Academic clubs (debate, science, etc.)	1	2	3	4	5
i. Political or social action groups.	1	2	3	4	5
j. Ethnic, language or religious clubs.	1	2	3	4	5
k. Other (specify): ______________________________	1	2	3	4	5

____

B.17 Which of the following sources of financial support were the most important in helping you to meet the total costs (tuition, living expenses, books, etc.) incurred while attending community college and/or university?

	First Most Important Source (Circle one only)	Second Most Important Source (Circle one only)
University or college fellowship or scholarship	01	01
Employer contributions.	02	02
Ontario Student Assistance Program (OSAP) - Canadian Student Loans (CSL).	03	03
Loans (from sources other than OSAP - CSL).	04	04
Summer employment earnings.	05	05
Employment while attending school	06	06
Spouse's earnings	07	07
Personal savings.	08	08
Parental financial support.	09	09
Other (specify): ______________________________	10	10

____

THOSE WHO HAVE AT SOME TIME WORKED FULL-TIME AFTER ATTENDING COLLEGE, UNIVERSITY OR EQUIVALENT (e.g. RYERSON, ONTARIO COLLEGE OF ART) CONTINUE WITH Q. B.18. OTHERS GO TO Q. B.22 ON PAGE 9

B.18 Which aspects of your community college or undergraduate university experiences were most valuable in preparing you for the work you obtained after leaving school?

(Circle one number on each line)

	Very Valuable	Valuable	Somewhat Valuable	Not Very Valuable	Not At All Valuable
a. Courses in your major field or specialization	1	2	3	4	5
b. Courses outside your major or specialization.	1	2	3	4	5
c. Friendships or contacts with other students	1	2	3	4	5
d. Relationships with particular faculty members	1	2	3	4	5
e. Extracurricular activities.	1	2	3	4	5
f. Other (specify): ______________________________	1	2	3	4	5

____

B.19 In thinking about the first full-time work you obtained after leaving college or university, how concerned were you that the job be related to your program or course of study?

	(Circle one only)
Very much concerned	1
Concerned	2
Did not care either way	3
Not too concerned	4
Not at all concerned.	5

B.20 To what extent do you feel that the first full-time job you obtained after leaving college or university was related to your program or course of study?

	(Circle one only)	
Very closely related	1	GO TO Q. B.22
Closely related	2	
Somewhat related	3	CONTINUE WITH Q. B. 21
Not too related	4	
Not at all related	5	

B.21 If your first full-time job was only "somewhat", "not too related" or "not at all related" to your program or course of study in college or university, which of the following reasons best explains this?

	Most Important (Circle one only)	Second Most Important Circle one only)	Third Most Important (Circle one only)
Never planned to take a closely related job	01	01	01
Prefer line of work not closely related	02	02	02
Tried closely related employment, but did not like it	03	03	03
First job was unrelated to program or course of study and I became interested in this type of work	04	04	04
Joined family business or firm	05	05	05
Decided that pay was more important than relationship to studies	06	06	06
Jobs related to program were not available where I live and I did not want to move	07	07	07
Could not get a closely related job, but would prefer one	08	08	08
Very few jobs seemed related to my program or course of study	09	09	09
Employment opportunities were scarce for people in jobs related to my program or course of study	10	10	10
Other reasons (specify): ______	11	11	11

B.22 *ONLY THOSE CURRENTLY ENROLLED IN COMMUNITY COLLEGE, UNIVERSITY OR EQUIVALENT (e.g. RYERSON, ONTARIO COLLEGE OF ART) PLEASE ANSWER THIS SECTION, OTHERS GO TO Q. B.24 ON PAGE 10*

Given the kind of education that you are receiving, if you had your choice, what sort of job or occupation would you most like to aim for? Think about what you would like to be doing after you finish schooling.

Be as specific as you can in describing the job and indicate the kind of place where you would like to work.

What would you like to do? ______

In what kind of business, industry or organization? ______

B.23 Everyone does not end up doing the job he or she likes. Considering your ability, marks, ambitions and family finances, what job do you think you will actually end up doing after finishing your studies?

What do you expect to do? ______________________________

____

In what kind of business, industry or organization? ______________________________

____

B.24 At any time, did you ever drop out or temporarily withdraw from college or university?

(Circle one only)

No . . . . 1 → *GO TO Q. B.27*

Yes, I dropped out and never returned. . . . . 2 → *GO TO Q. B.26*

Yes, I dropped out for one or more terms but I returned later, either to the same or another institution. 3 → *CONTINUE WITH Q. B.25a*

B.25 a. What were your reasons for returning the first time?

(Write in): ______________________________

____

b. If you dropped out and returned a second time, what were your reasons for returning the second time?

(Write in): ______________________________

____

B.26 What were the most important reasons for your dropping out or withdrawing from college or university the first time?

	Most Important Reason (Circle one only)	Second Most Important Reason (Circle one only)
Financial difficulties at home	01	01
Program of study not what I expected	02	02
Failed or was failing at my studies.	03	03
Became pregnant.	04	04
Wanted to go to work	05	05
Got married or wanted to marry	06	06
Poor health or disability.	07	07
Level of instruction was poor.	08	08
Alienation or boredom with studies	09	09
Changed my job plans	10	10
Other (specify): ______________________	11	11

B.27 Looking at your year(s) at a college or university, how satisfied, overall, are you with your formal education?

(Circle one only)

Very satisfied 1

Somewhat satisfied 2

Indifferent. 3

Somewhat dissatisfied. 4

Very dissatisfied. 5

SECTION C: WORK EXPERIENCES

C.1 Are you now working either full-time or part-time? (Circle one only)

Yes, full-time	1	→ *CONTINUE WITH Q. C.2*
Yes, part-time	2	→ *GO TO Q. C.18 ON PAGE 16*
Yes, both full-time and part-time	3	→ *CONTINUE WITH Q. C.2*
No	4	→ *GO TO Q. C.16 ON PAGE 15*

CURRENT WORK

C.2 Please tell us about the main job or occupation that you now have. We shall call this main job or occupation, your "current job".

a. What kind of job or occupation do you have? (For example, salesperson, waitress, secretary, bus driver, etc.)

(Write in): ____________________

b. What kind of business or industry is this? (For example, retail shoe store, restaurant, cement manufacturer)

(Write in): ____________________

c. What are the main duties of your job? (For example, salesperson - selling products to customers at a major department store)

(Write in): ____________________

____

d. Are you: (Circle one only)

An employee of a PROFIT-MAKING firm or organization working for wages, salary, or commissions (include crown corporation)	1
A GOVERNMENT employee (Federal, provincial, or other local government)	2
An employee of a NON-PROFIT-making organization (hospital, social service agency, schools, etc.)	3
Self-employed in your OWN business, professional practice, or farm	4
Working WITHOUT PAY in family business or farm	5
Working WITH PAY in family business or farm	6
Other (specify): ____________________	7

C.3 a. When did you start your current job?

Starting date: MONTH ____________ YEAR ____________

b. In your current job what is your pay before taxes?

$ _______ per week, or $ _______ per month or $ _______ per year
(earnings before taxes)

c. Number of hours per week that you work on the average: ____________ hours per week

d. In your current job, what was your pay when you started the job?

$ _______ per week, or $ _______ per month or $ _______ per year
(earnings before taxes)

C.4 What was the main method(s) you used in successfully finding your current job?

	First Most Important (Circle one only)	Second Most Important (Circle one only)
Through friends	01	01
Through part-time or summer jobs	02	02
Through family connections	03	03
University or college placement office	04	04
Work placement program while at community college	05	05
Canada Manpower Centre	06	06
Advertisement in newspaper, magazine, radio, etc.	07	07
Advertisement in professional journal	08	08
Private employment agency	09	09
Personal effort (e.g. contacted firms, placed ads in newspapers etc.)	10	10
Other action(s) (specify):		
First: ______	11	11
Second: ______	12	12

C.5 The things people do at their jobs can involve processing information (e.g. reading, writing), working with their hands (e.g. using machines, typing, painting, etc.), and dealing with people (e.g. giving and receiving directions, organizing groups of people, selling, teaching, etc.); or sometimes all three activities occur at the same time.

a. In an average week on your main job, what percentage of your time do you spend reading, writing, dictating, or dealing with any kind of written materials (letters, files, computer output, reports, memos, books, blueprints, etc.)?

(Write in) ☐ percentage

b. In your main job, what percentage of your time do you spend working with your hands? What proportion of your time do you spend constructing, using or repairing tools, machines, or equipment? Include everything that involves working with your hands—operating a drill, calculator, typing, microscope, painting, sculpting, playing a musical instrument, etc.

(Write in) ☐ percentage

c. What percentage of your time do you spend on your main job dealing with people? Do not include passing the time of day, but only conversations necessary for carrying out your work activities. For example, giving and receiving directions, organizing groups of people, selling, teaching, and advising clients.

(Write in) ☐ percentage

C 6 Compared to the people who started in your line of work at about the same time you did, how would you rate your abilities with respect to:

a. Processing information? (Circle one only)

Well above average	1
Somewhat above average	2
Average	3
Somewhat below average	4
Well below average	5

b. Working with your hands? (Circle one only)

Well above average	1
Somewhat above average	2
Average	3
Somewhat below average	4
Well below average	5

c. Dealing with people? (Circle one only)

Well above average	1
Somewhat above average	2
Average	3
Somewhat below average	4
Well below average	5

C.7 All in all, how satisfied would you say you are with your job? Are you:

(Circle one only)

Very satisfied	1
Somewhat satisfied	2
Indifferent	3
Not too satisfied	4
Not at all satisfied	5

C.8 Knowing what you know now, if you had to decide all over again whether to take the job you now have, what would you decide? Would you:

(Circle one only)

Decide without hesitation to take the same job	1
Decide with reservations to take the same job	2
Indifferent about taking the same job	3
Decide, with some doubt, not to take the same job	4
Decide definitely not to take the same job	5

C.9 If a good friend of yours told you he was interested in working in a job like yours for your employer, what would you tell him? How strongly would you recommend it?

	(Circle one only)
Strongly recommend it	1
Recommend it	2
Indifferent about recommending it	3
Advise against it	4
Strongly advise against it	5

C.10 If you were free to go into any type of job you wanted, what would your choice be? Please select the one that best describes the choice you would make today.

	(Circle one only)
Same as now	1
Would want to retire or not work	2
Some other job	3
Don't Know	8

C.11 In general, how well would you say that your job measures up to the sort of job you wanted when you took it?

	(Circle one only)
Exactly like the job I wanted	1
Very much like the job I wanted	2
Somewhat like the job I wanted	3
Not very much like the job I wanted	4
Not at all like the job I wanted	5

C.12 Compared to the people who started out in your line of work at about the same time you did, how have you done?

	(Circle one only)
Much better than average	1
Better than average	2
About average	3
Less than average	4
Much less than average	5

C.13 Among the following, which do you think was the most important criteria used by your employer when hiring you for your current job?

	Most Important Reason (Circle one only)	Second Important Reason (Circle one only)
Your personality or how you presented yourself	01	01
Your high school qualifications	02	02
Your university qualifications	03	03
Your community college qualifications	04	04
Qualifications obtained elsewhere	05	05
Your relationship to a friend connected with the employer	06	06
Your relationship to an influential relative	07	07
Your performance on tests	08	08
Other criteria (specify): ______________________	09	09

C.14 Among the following, which statement best describes the preparation you received once you started your current job?

(Circle one only)

There was little or no training required 1

Someone who knew the job showed me what to do. 2

Had formal on-the-job training 3

The firm had me trained outside. 4

Picked it up myself. 5

Other (specify): ____ 6

C.15 How true is each statement below about your current job:

(Circle one number for each statement)

	Very True	True	Somewhat True	Not Very True	Not At All True	Doesn't Apply To Me
a. Chances of promotion are good	1	2	3	4	5	6
b. Travel to and from work is convenient	1	2	3	4	5	6
c. Job offers opportunities for exercising leadership.	1	2	3	4	5	6
d. The work is routine and predictable	1	2	3	4	5	6
e. The pay is good	1	2	3	4	5	6
f. I am given a lot of freedom to decide how to do my work	1	2	3	4	5	6
g. I am given a chance to use my abilities	1	2	3	4	5	6
h. The job matches my educational background	1	2	3	4	5	6
i. Job security is good.	1	2	3	4	5	6
j. Job is boring	1	2	3	4	5	6
k. I can see the results of my work.	1	2	3	4	5	6
l. Job is highly regarded by other people.	1	2	3	4	5	6
m. I work frequently under pressure of time.	1	2	3	4	5	6
n. I do not have to bring work home often.	1	2	3	4	5	6
o. Job allows for personal growth and development.	1	2	3	4	5	6
p. My work situation is not competitive.	1	2	3	4	5	6
q. Job requires getting along well with co-workers	1	2	3	4	5	6
r. Job requires getting along well with supervisor	1	2	3	4	5	6
s. Job provides me with friends I see socially outside of work	1	2	3	4	5	6
t. The job involves dirty work	1	2	3	4	5	6

IF YOU ARE CURRENTLY WORKING FULL-TIME, GO TO Q. C.22 ON PAGE 17

C.16 At present are you looking for part-time or full-time work?

(Circle one only)

Not working and not looking for work	1	*GO TO Q. C.19 ON PAGE 16*
Am unemployed and looking for full-time work only.	2	*CONTINUE WITH Q. C.17*
Am unemployed and looking for full-time work but would settle for a part-time job	3	
Am unemployed and looking for part-time work only.	4	
Work part-time now	5	*GO TO Q. C.18 ON PAGE 16*

C.17 What are the reasons you are not working at present?

	Most Important Reason (Circle one only)	Second Important Reason (Circle one only)	Third Important Reason (Circle one only)
Was fired from my job	01	01	01
I quit my last job	02	02	02
Am only temporarily laid off	03	03	03
Going to school	04	04	04
Not enough job openings available	05	05	05
Jobs available are dead end	06	06	06
Health problems or physical handicap	07	07	07
Could not arrange child care	08	08	08
Other family responsibilities (including pregnancy)	09	09	09
Not qualified for types of work available	10	10	10
There were jobs but none where I could use my training	11	11	11
Job with suitable work schedule or salary not available	12	12	12
Spouse preferred that I didn't work	13	13	13
Other (specify): ________________	14	14	14

GO TO Q. C.19

C.18 What are your main reasons for wanting or settling for, part-time work?

	Most Important Reason (Circle one only)	Second Important Reason (Circle one only)
Want to work for pay as soon as possible	1	1
Want to combine work with going to school	2	2
As a means of supporting my education	3	3
Want to help to financially support my family	4	4
Part-time work fits well with my life-style	5	5
Other (specify): ________________	6	6

C.19 Have you ever had a full-time job or occupation? (Circle one only)

Yes. . . . . 1 → *CONTINUE WITH Q. C.20*

No . . . . 2 → *GO TO Q. C.21 ON PAGE 17*

C.20 How long has it been since your last full-time job? (Circle one only)

Never have been employed full-time. . . . . 1 → *CONTINUE WITH Q. C.21*

Less than a month 2

From 1 - 3 months 3

From 4 - 12 months. 4

Over a year 5

(2–5) → *GO TO Q. C.22 ON PAGE 17*

C.21 What are your reasons for not ever having obtained a full-time job?

	Most Important Reason (Circle one only)	Second Important Reason (Circle one only)
Have been going to school	1	1
Have been a homemaker or housewife	2	2
Have had health problems or physical handicap	3	3
Have been looking for suitable work	4	4
Travelling	5	5
Worked at part-time job(s)	6	6
Other reasons (specify): ______________________	7	7

IF YOU HAVE NEVER HAD A FULL-TIME JOB, GO TO Q. D.1 ON PAGE 19

C.22 Starting with your first full-time job, briefly describe it as well as your following jobs using the JOB HISTORY TABLE provided below. Exclude your current job or occupation (if you are now employed) since we have already questioned you about it.

IF YOUR CURRENT JOB IS YOUR FIRST FULL-TIME JOB, GO TO Q. C.23

JOB HISTORY TABLE - FULL-TIME JOBS ONLY

KIND OF JOB OR OCCUPATION YOU HAD	Self-employed?		What kind of business or industry was this?	Date of Employment		Location (town or city)	Earnings before taxes	
	Yes	No		Starting Month/yr	Ending Month/yr		Starting	Ending
Example: Sales Clerk		✓	Department store	July'73	Aug.'75	Barrie	$400	$600

C.23 Remembering back to when you were looking for your first full-time job, how many weeks did your first job search take?

(Write in): __________ weeks

OR

	(Circle one only)
Job was offered to me	1
My part-time job became my full-time job	2

C.24 What was the total number of job offers you had before you decided to take your first job?

(Write in): __________

C.25 When you first started looking for a full-time job, what was the lowest wage/salary offer (before taxes) that you thought you would accept?

$ _________ per week, or $ _________ per month or $ _________ per year
(earnings before taxes)

OR

	(Circle one only)
Had no information concerning salaries/wages	1
Didn't care	2
Didn't think about it	3

C.26 What was the one main reason for leaving that first job?

	(Circle one only)
Have not left first full-time job	01
Left to go back to school	02
Was given another job in my company or organization	03
Was promoted within my company or organization	04
Left for another job that I wanted	05
Was laid off and took another job	06
Was laid off and went back to school	07
Decided to move to another town or city	08
Other reason (specify): ______________________________	09

____

IF YOUR CURRENT JOB IS YOUR FIRST FULL-TIME JOB, GO TO D.1 ON PAGE 19

C.27 Among the following, which do you think was the most important criteria used by your employer when hiring you for your first job?

	Most Important Reason (Circle one only)	Second Important Reason (Circle one only)
Your personality or how you presented yourself	01	01
Your high school qualifications	02	02
Your university qualifications	03	03
Your community college qualifications	04	04
Qualifications obtained elsewhere	05	05
Your relationship to a friend connected with the employer	06	06
Your relationship to an influential relative	07	07
Your performance on tests	08	08
Other criteria (specify): ______________________	09	09

C.28 Among the following, which statement best describes the preparation you received once you started your first job?

	(Circle one only)
There was little or no training required	1
Someone who knew the job showed me what to do	2
Had formal on-the-job training	3
The firm had me trained outside	4
Picked it up myself	5
Other (specify): ______________________________	6

SECTION D: PERSONAL VALUES AND ATTITUDES

D.1 Here are some values to which different people attach varying importance in their lives. Please tell us how important each one of the following values is to you.

(Circle one on each line)

	Very Important	Important	Somewhat Important	Not Very Important	Not At All Important
a. Developing friendships	1	2	3	4	5
b. Involvement in work or a career	1	2	3	4	5
c. Involvement in community affairs	1	2	3	4	5
d. Marriage	1	2	3	4	5
e. Living together with companion or partner	1	2	3	4	5
f. Involvement in leisure time activities	1	2	3	4	5
g. Developing an independent life style	1	2	3	4	5
h. Other (specify): ______________________	1	2	3	4	5

D.2 Now, please write in the letter of the item above that presently gives you the most satisfaction:

(Write in): ______________

... and the least satisfaction:

(Write in): ______________

D.3 Everybody has some idea of what they would look for in choosing an ideal job. For example, some people might consider career advancement as very important, other would stress pay or working conditions. Please tell us what factors in your opinion would be most important to you in choosing an ideal job.

D.4 Persons differ widely in the way they identify and go about solving problems in their various activities--such as jobs, hobbies, school work or community projects. To what extent do each of the following statements describe your feelings?

(Circle one on each line)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
a. I prefer to work on problems that clearly have one or a few identifiable solutions	1	2	3	4	5
b. I prefer to work on broadly defined problems which can be approached in a number of different ways	1	2	3	4	5
c. I prefer to work on the immediate solution to a problem.	1	2	3	4	5
d. I prefer working on recognized and pressing problems rather than following up problems of strictly personal interest.	1	2	3	4	5
e. I prefer open ended problems that develop and become more defined as you get more deeply into them	1	2	3	4	5
f. I prefer to deal with the really important problems that probably can't be solved once and for all	1	2	3	4	5
g. I prefer to work in a group with clearly defined responsibilities so that I can carry out my portion of the task with as little interference as possible	1	2	3	4	5

D.5 Here are some words which we would like you to use to describe yourself as a person. As you can see, each is a pair with a word at the end and its opposite at the other end. Please read each pair carefully and circle the number that comes closest to describing how you evaluate yourself. Here is an example: LUCKY . . 1 . 2 . 3 . 4 . 5 . 6 . 7 . . UNLUCKY.

If you think of yourself as being very lucky you would circle the number 1 on this scale. If you think of yourself as very unlucky you would circle the number 7. If you feel you are somewhat in between very lucky and very unlucky you would circle a number between 2 and 6 which is the closest to your feeling.

(Circle one number on each line)

MYSELF AS A PERSON

ATTRACTIVE	1	2	3	4	5	6	7	UNATTRACTIVE
IMPORTANT	1	2	3	4	5	6	7	UNIMPORTANT
PROUD	1	2	3	4	5	6	7	ASHAMED
EFFECTIVE	1	2	3	4	5	6	7	INEFFECTIVE
OUTGOING	1	2	3	4	5	6	7	SHY
ORGANIZED	1	2	3	4	5	6	7	DISORGANIZED
INTERESTING	1	2	3	4	5	6	7	BORING
VALUABLE	1	2	3	4	5	6	7	WORTHLESS
CONFIDENT	1	2	3	4	5	6	7	LACK CONFIDENCE
DESIRABLE	1	2	3	4	5	6	7	UNDESIRABLE
ACTIVE	1	2	3	4	5	6	7	PASSIVE
INTELLIGENT	1	2	3	4	5	6	7	UNINTELLIGENT
QUICK	1	2	3	4	5	6	7	SLOW
ABLE	1	2	3	4	5	6	7	UNABLE
ADEQUATE	1	2	3	4	5	6	7	INADEQUATE
CAPABLE	1	2	3	4	5	6	7	INCAPABLE

D.6 We would like to find out something about people's outlook on life. Below are six pairs of statements reflecting orientations to things. As you can see, each statement is paired with its opposite. Using the numbers separating each pair of statements, please indicate which statement in a pair comes closest to your opinion.

(Circle one number on each line)

a.	Many of the unhappy things in people's lives are at least partly due to bad luck	1 . 2 . 3 . 4 . 5 . 6 . 7	People's misfortunes result from the mistakes they make
b.	For the average citizen becoming a success is a matter of hard work, luck has little or nothing to do with it.	1 . 2 . 3 . 4 . 5 . 6 . 7	For the average guy, getting a good job depends mainly on being in the right place at the right time
c.	Most people do not realize the extent to which their lives are controlled by accidental happenings	1 . 2 . 3 . 4 . 5 . 6 . 7	For any guy, there is no such thing as luck
d.	In the long run, the bad things that happen to us are balanced by the good things	1 . 2 . 3 . 4 . 5 . 6 . 7	Most misfortunes are the result of lack of ability, ignorance, laziness, or all three
e.	With fate the way it is, many times I feel that I have little influence over the things that happen to me	1 . 2 . 3 . 4 . 5 . 6 . 7	It is impossible for me to believe that chance or luck plays an important role in my life
f.	What happens to me is my own doing.	1 . 2 . 3 . 4 . 5 . 6 . 7	Sometimes I feel that I don't have enough control over the direction my life is taking

D.7 What is your present marital status? (Circle one only)

Single	1
Engaged	2
Living with companion or partner	3
Married	4
Separated	5
Divorced	6
Widowed	7

D.8 Taking into account all sources of income such as wages, payments from the government, return on savings and investments, what was your own personal income before taxes in 1978?

(Circle one only)

Under $3,000	01
$3,000 - $3,999	02
$4,000 - $4,999	03
$5,000 - $5,999	04
$6,000 - $6,999	05
$7,000 - $7,999	06
$8,000 - $8,999	07
$9,000 - $9,999	08
$10,000 - $14,999	09
$15,000 - $19,999	10
$20,000 - $24,999	11
$25,000 - $29,999	12
$30,000 - $34,999	13
$35,000 - $39,999	14
$40,000 - $49,999	15
$50,000 or more	16

D.9 Now, we would like to know a little more about your living family members excluding yourself. Starting with your parents, then proceeding on to your spouse or companion, and finally to your brother(s) and sister(s) could you tell us each one's age, job title and place of work or the current or last full-time job and the highest level of education (e.g. Grade 9, B.A., etc.) attained by each one of your family members.

		Age	Kind of Job or Occupation	What kind of business or industry	Education Completed
	Father				
	Mother				
	Spouse/ Companion				
	Sex (Circle)	BROTHERS AND SISTERS			
1	M F				
2	M F				
3	M F				
4	M F				
5	M F				
6	M F				
7	M F				
8	M F				

Please feel free to comment here on the questions you have answered in this survey. Moreover, there may be important areas related to education or work we have not included in this questionnaire. If so, would you bring them to our attention?

____

____

____

We may want to contact you again in approximately five years in order to re-consider the changes that will occur in aspects of your work, education and family life. To help us contact you in the future, please provide us the names and addresses of two friends or relatives who will probably know of your location in five years and are not likely to have moved themselves. THANK YOU SO MUCH FOR YOUR TIME AND CO-OPERATION.

(1)

NAME: ____________________

RELATIONSHIP: ____________________

ADDRESS: ____________________

____

TELEPHONE: ____________________
(Area Code - Phone No.)

(2)

NAME: ____________________

RELATIONSHIP: ____________________

ADDRESS: ____________________

____

TELEPHONE: ____________________
(Area Code - Phone No.)